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Note by the President of the Security Council

In paragraph 2 of resolution 2105 (2013), the Security Council requested the Panel of Experts established pursuant to resolution 1929 (2010) to provide a final report to the Council with its findings and recommendations.

Accordingly, the President hereby circulates the report dated 5 June 2014 received from the Panel of Experts (see annex).

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Annex

Letter dated 5 June 2014 from the Panel of Experts established pursuant to resolution 1929 (2010) addressed to the President of the Security Council

On behalf of the Panel of Experts established pursuant to Security Council resolution 1929 (2010), I have the honour to transmit herewith, in accordance with paragraph 2 of resolution 2105 (2013), the final report on its work.

(*Signed*) Salomé **Zourabichvili**
Coordinator
Panel of Experts established pursuant to resolution 1929 (2010)

(*Signed*) Jonathan **Brewer**
Expert

(*Signed*) Chunjie **Li**
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(*Signed*) Thomas **Mazet**
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(*Signed*) Jacqueline **Shire**
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(*Signed*) Kazuto **Suzuki**
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(*Signed*) Elena **Vodopolova**
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(*Signed*) Olasehinde Ishola **Williams**
Expert

Final report of the Panel of Experts established pursuant to resolution 1929 (2010)

Summary

The Panel submits this report less than two months before the deadline set by the Joint Plan of Action for the conclusion of a comprehensive agreement between the Islamic Republic of Iran and its counterparts in the E3+3,[a] with expectations high that a comprehensive solution is within reach. The prospect of such a solution has dramatically shifted the context in which the Panel works. The Joint Plan of Action, which entered into force in January 2014, provides the Islamic Republic of Iran with limited, targeted relief from certain unilateral or multilateral sanctions. The International Atomic Energy Agency has reported that, to date, the Islamic Republic of Iran has fulfilled its "voluntary measures" agreed to under the Joint Plan of Action.

A challenge for States during this period of intense negotiation and, should it occur, implementation of a comprehensive solution, will be to maintain clarity with respect to State obligations under existing Security Council sanctions. Some States have indicated to the Panel a degree of uncertainty as to whether Security Council resolutions concerning the Islamic Republic of Iran remain fully in force. One source of uncertainty concerns the status of obligations regarding procurement related to uranium enrichment by the Islamic Republic of Iran, should such activities continue under a comprehensive solution.

The Panel investigated more than two dozen cases during this mandate involving alleged violations of resolution 1929 (2010) and prior resolutions. The majority of incidents concern the attempted procurement of dual-use items.

Most of those items, with some exceptions, fall below established control thresholds. Their identification remains a challenge to the implementation of Security Council sanctions intended to target Iranian procurement of goods and materials for prohibited activities. On the basis of the cases investigated by the Panel and information made available by States, it is increasingly difficult for authorities to identify links between below-threshold items and prohibited end users or end uses in the Islamic Republic of Iran. This may be a function of more sophisticated procurement strategies on the part of the Islamic Republic of Iran, which has developed methods of concealing procurement, while expanding prohibited activities. Such methods can also be used by the Islamic Republic of Iran to procure and finance legitimate trade, which further complicates the efforts of States to identify illicit procurement.

The Islamic Republic of Iran has continued to engage in ballistic missile activities. It is reported to have conducted a number of ballistic missile test launches over the past year, which are a violation of paragraph 9 of resolution 1929 (2010). It is also developing its launch capabilities: a new launch site near the city of Shahrud was identified. At the same time, the Islamic Republic of Iran decided to forgo its 2013 Great Prophet military exercises, during which numerous ballistic missiles have traditionally been launched.

Member States and media have continued to report allegations of ongoing arms transfers by the Islamic Republic of Iran. During the current mandate, the Panel investigated one case of an attempted transfer by the Islamic Republic of Iran of conventional arms and related materiel. The actions of the Islamic Republic of Iran in this respect stand in contrast to the apparent restraint it has shown in other areas of prohibited activities.

Several States have conveyed to the Panel their assessment that there has been a decrease in the number of detected attempts by the Islamic Republic of Iran to procure items for prohibited programmes, and related seizures, since mid-2013. While the Panel cannot confirm this development independently, because of delays between incidents and their subsequent reporting to the Committee, it is possible that this decrease reflects the new political environment in the Islamic Republic of Iran and diplomatic progress towards a comprehensive solution.

[a] The E3+3 countries include France, Germany, the United Kingdom of Great Britain and Northern Ireland, China, the Russian Federation and the United States of America.

Recommendations

The Panel recommends that the Committee address the following issues identified by the Panel as challenges to the effective implementation of sanctions:

- In the event of a comprehensive solution to the Iranian nuclear issue, States will require guidance regarding the status of Security Council sanctions contained in resolution 1929 (2010) and previous resolutions, in particular with respect to nuclear-related procurement.
- Member States would benefit from additional clarification regarding their reporting obligations to the Committee with respect to possible incidents of non-compliance. Such guidance should address the content, timing and sequencing of reporting steps. This could include clarification of disposal procedures and possible measures of assistance to States.
- States are advised to make available to the Committee any additional information regarding designated individuals, in particular bio-identifiers such as passport numbers, photograph, and date and place of birth. The Panel stands ready to assist the Committee in this task.
- States should alert their respective manufacturers of dual-use goods to the risk of diversion to the Islamic Republic of Iran through overseas distributors and encourage the effective implementation and regular examination of internal compliance procedures.
- States and financial institutions are encouraged to make available to the Panel further information regarding typologies of proliferation financing in order to promote better understanding of such transactions.
- States should alert their carriers and freight forwarders to the importance of obtaining more accurate and complete documentation for cargo. This is especially important in the case of shipper-owned and -sealed containers originating in or destined for the Islamic Republic of Iran. This initiative could be promoted through international professional or trade associations.
- In order to identify front companies and, as appropriate, assets of designated individuals and entities, States should be encouraged to provide open public registries of companies with as many details as possible of their legal ownership, beneficial ownership and shareholders. This is consistent with the current priorities of the Financial Action Task Force's.

Introduction

1. The present report has been prepared in accordance with the Panel's mandate as set forth in paragraph 29 of resolution 1929 (2010), and renewed by resolution 2105 (2013) on 5 June 2013. It summarizes the Panel's work over the past year.

Methodology

2. The Panel carries out its work on the basis of the mandate set forth in paragraph 29 of resolution 1929 (2010), mindful of the methodological standards contained in the report of the Informal Working Group of the Security Council on General Issues of Sanctions of 22 December 2006 (S/2006/997) and further

described in *Best Practices and Recommendations for Improving the Effectiveness of United Nations Sanctions*. The Panel operates under the direction of the Security Council Committee established pursuant to resolution 1737 (2006). The Panel is aware of potential sensitivities in connection with information received from States or the private sector and is mindful of the importance of maintaining the confidentiality of all sources of information.

Activities of the Panel

3. The Panel's work includes consultations with Member States, inspections of reported incidents, and outreach regarding the implementation of sanctions. The Panel consults regularly with experts in academia, non-governmental organizations, the private sector and, as appropriate, United Nations bodies and expert panels. The Panel held consultations with 32 States and undertook five inspection visits concerning reported incidents. Annex I contains a list of all Member States visited by the Panel.

4. The Panel wishes to emphasize the positive example set by those States which reported incidents of non-compliance. It would also like to highlight the high level of cooperation it has received from States and entities approached during these inspections and investigations, in particular those that have provided forensic or technical analysis of samples.

International context

5. Major events over the past year have shifted dramatically the political context in which the Panel has carried out its work. The election of President Hassan Rouhani on 15 June 2013 was followed by a reinvigoration of the diplomatic process aimed at resolving the nuclear issue. The agreement with the E3+3 on 24 November 2013 on the Joint Plan of Action entered into force on 20 January 2014.[1]

6. The Joint Plan of Action establishes a six-month period ending 20 July 2014 in which the Islamic Republic of Iran promises to take "voluntary measures" to begin to restore confidence in the peaceful nature of its nuclear programme. Although Security Council sanctions remain fully in place, during this period certain unilateral and multilateral sanctions are suspended, and some assets have been released. As of mid-April, the Islamic Republic of Iran had received four instalments of US$ 4.2 billion in funds previously frozen abroad.[2]

7. The economy of the Islamic Republic of Iran has suffered from high inflation and an inability to access foreign capital, although reports suggest that the situation is slowly improving. The Rouhani Government has introduced new economic policies and recent reports suggest that the economy is "stabilizing" and stands to further improve should a comprehensive agreement be reached. The International Monetary Fund projects that, after contracting for two consecutive years, "Iran's

[1] The E3+3 countries include France, Germany, the United Kingdom, China, the Russian Federation and the United States of America.

[2] "Iran to get fifth instalment of frozen assets next week" (translated text of report from IRNA news website), BBC Monitoring Service, 11 April 2014.

economy will rebound by 1.5 per cent in the current year — even if sanctions relief under a temporary deal proves short lived — as Tehran undertakes reforms".[3]

8. Although the Joint Plan of Action has generated a great deal of optimism over the future course of the country's relationship with the international community, there remain concerns regarding the Islamic Republic of Iran's continuing alleged transfers of conventional arms and related materiel in violation of Security Council resolutions.

Recent developments in prohibited activities

1. Nuclear

9. The conclusion of both a Framework for Cooperation between the International Atomic Energy Agency (IAEA) and the Islamic Republic of Iran on 11 November 2013, and the Joint Plan of Action on 24 November 2013 between the Islamic Republic of Iran and the E3+3, have led to a scaling-back of certain activities by the Islamic Republic of Iran and increased transparency with IAEA.

Implementation of the Joint Plan of Action

10. Under the Joint Plan of Action, the Islamic Republic of Iran has committed itself, inter alia, to a suspension of uranium enrichment over 5 per cent, the dilution of existing stocks of 20 per cent enriched uranium or fabrication into fuel plates, no further installation of centrifuges, and the suspension of work on the IR-40 heavy water research reactor (Arak reactor).[4] In monthly status reports regarding the implementation of "voluntary measures" taken by the Islamic Republic of Iran to implement the Joint Plan of Action, IAEA has confirmed, inter alia, that the country has ceased enrichment of uranium above 5 per cent, is no longer operating centrifuge cascades in an interconnected manner, and has diluted 50 per cent of its 20 per cent-enriched UF6 stocks.[5] IAEA also confirmed that the Islamic Republic of Iran has halted further installation of centrifuges at the Natanz fuel enrichment plant and work on the Arak reactor, and provided IAEA with information regarding centrifuge production, assembly and storage facilities.[6] The Islamic Republic of Iran is continuing certain activities, including enrichment of uranium to 5 per cent and existing safeguarded research and development on advanced centrifuges.[7]

Implementation of the Framework for Cooperation

11. Under this Framework, and in parallel with the Joint Plan of Action, the Islamic Republic of Iran agreed with IAEA to implement "six initial measures" by 20 February. IAEA has confirmed that the Islamic Republic of Iran met the initial requirements and the parties agreed to a further set of seven measures to be

[3] "Iran economy stabilizing, to soar if deal reached: IMF", Agence France-Presse, 11 April 2014.

[4] International Atomic Energy Agency (IAEA), "Communication dated 27 November 2013 received from the EU High Representative concerning the text of the Joint Plan of Action" (INFCIRC/855).

[5] As at 14 April 2014, it had diluted 104.5 kg of 209 kg.

[6] See IAEA, "Status of Iran's nuclear programme in relation to the Joint Plan of Action", 17 April 2014 (GOV/INF/2014/10); IAEA, "Status of Iran's nuclear programme in relation to the Joint Plan of Action", 20 January 2014 (GOV/INF/2014/1).

[7] IAEA, "Implementation of the NPT Safeguards Agreement and relevant provisions of Security Council resolutions in the Islamic Republic of Iran", 17 April 2014 (GOV/INF/2014/10), (see "Main Developments" and paras. 30-33).

implemented by 20 May 2014.[8] These include the provision by the Islamic Republic of Iran of initial information concerning potential military dimensions of its nuclear programme, in particular the development of exploding bridgewire detonators.[9] This is to be followed by a third set of measures yet to be agreed between the Islamic Republic of Iran and IAEA, and to be implemented by 20 August.

Possible military dimensions

12. There remain areas of concern regarding the Islamic Republic of Iran's nuclear programme and its possible military dimensions. In its report of 20 February 2014, IAEA referred to its 2011 analysis of allegations that the Islamic Republic of Iran has carried out activities relevant to the development of a nuclear explosive device. Among the issues identified by IAEA in 2011 are concerns about "alleged studies" regarding "how to integrate a new spherical payload into the existing payload chamber which would be mounted in the re-entry vehicle of the Shahab 3 missile".[10] IAEA recently noted that information regarding the Islamic Republic of Iran's development of a nuclear explosive device "is assessed by the Agency to be, overall, credible" and despite the country's insistence that the claims are unfounded, "the Agency has obtained more information since November 2011 that has further corroborated the analysis contained in [the annex to the Director-General's report of November 2011]".[11] It is not known whether the additional information addresses the integration of a nuclear payload on a delivery vehicle.

2. Ballistic missiles

Facilities

13. The Islamic Republic of Iran is continuing development of its ballistic missile and space programmes. A new missile launch site 40 km from the city of Shahrud was identified in August 2013.[12] A larger launch complex is assessed to be close to completion at the Imam Khomeini Space Centre at Semnan for ballistic missiles and satellite launch vehicles.[13] The Islamic Republic of Iran announced on 9 June 2013 the opening of the Imam Sadeq Observation and Monitoring Centre for monitoring space objects, in particular satellites.[14]

[8] IAEA, "IAEA and Iran conclude talks in connection with implementation of Framework for Cooperation", IAEA Press Release, 9 February 2014.

[9] "Iran has briefed U.N. nuclear agency on detonators — ISNA", Reuters, 4 May 2014.

[10] IAEA, "Implementation of the NPT Safeguards Agreement and relevant provisions of Security Council resolutions in the Islamic Republic of Iran" (8 November 2011, GOV/2011/65, para. 59).

[11] IAEA, "Implementation of the NPT Safeguards Agreement and relevant provisions of Security Council resolutions in the Islamic Republic of Iran" (20 February 2014, GOV/2014/10, para. 64).

[12] Jeremy Binnie and Joseph Bermudez, "Second Iranian space-launch centre revealed", *IHS Jane's Defence Weekly*, 7 August 2013. The site is located 165 km north-east of the Semnan space centre.

[13] "Iran to launch new space center, more satellites soon: Defense Minister", Press TV, 20 June 2013; "Minister: Iran to launch several new space Centers", Fars News Agency, 10 July 2013; "Imam Khomeini Space Center is 80 per cent complete", *Tehran Times*, 2 June 2012.

[14] "Iran Defence Ministry launches space center", RIA Novosti, 9 June 2013; "Iran says it sets up space monitoring center", Associated Press, 9 June 2013; "Ahmadinejad opens Iran's first space monitoring centre", FARS News, 10 March 2013.

Ballistic missile launches

14. On 10 February 2014, the Islamic Republic of Iran announced the successful testing of the Barani ballistic missile, which was described by an Iranian official as a "new generation of long-range ballistic missiles carrying multiple re-entry vehicle payloads".[15] The Minister of Defence, Hossein Dehghan, said it was capable of "destroying massive targets and [...] multiple targets".[16]

15. The Joint Plan of Action makes no reference to the Islamic Republic of Iran's ballistic missile activities.

3. Transfers of conventional arms and related materiel

16. Despite sanctions prohibiting such activities, the Islamic Republic of Iran has repeatedly asserted its right to transfer arms and related materiel abroad. Such transfers are substantiated by numerous media reports and statements by concerned States and recipient groups.

17. Under President Hassan Rouhani, the Islamic Republic of Iran has continued a policy of military cooperation, termed "defence diplomacy".[17] Such cooperation has reportedly been pursued with a number of countries, although it is not possible for the Panel to determine whether transfers of arms are involved.[18] There has recently been media reporting regarding an alleged agreement dated November 2013 under which the Islamic Republic of Iran would provide Iraq with close to $200 million in arms and related materiel. Iraqi authorities firmly denied this allegation in writing to the Committee.

18. The war in the Syrian Arab Republic has intensified the demand for arms and related materiel on all sides to the conflict; the Islamic Republic of Iran's military support for the current government in the Syrian Arab Republic is well documented.[19] The war has also created additional opportunities for the Quds Force of the Islamic Revolutionary Guard Corps (IRGC) to be even more active in the

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[15] Jeremy Binnie, "Iran announced new missile tests", *IHS Jane's Defence Weekly*, 13 February 2014.

[16] Ibid.

[17] "Iran's president urges Defence Ministry to export weapons", TREND News Agency (Azerbaijan), 1 March 2014.

[18] See "Sultanate, Iran sign MOU on defence cooperation", *Times of Oman*, 18 September 2013; "Iran Revolutionary Guard training new Zimbabwe elite force", *The Telescope News*, 16 April 2014; "Iran-Tajikistan to sign Defence MOU", TREND News Agency (Azerbaijan), 13 May 2010; "VP: Iran ready to expand military cooperation with Azerbaijan", Tasnim News, 15 April 2014; "India welcomes defence cooperation with Iran", Press TV, 20 July 2013; "Defence cooperation agreed with Qatar", Payvand Iran News, 25 February 2010; "Afghanistan strategic cooperation", NSBC International, 10 December 2013; "Armenia, Iran discuss military cooperation", TREND News Agency (Azerbaijan), 8 February 2013.

[19] See "Iran boosts military support to Syria", Reuters, 21 February 2014; "Azerbaijan defence Minister meets with chief of Iranian armed forces", APA.AZ, 15 April 2014; "Iran to continue supporting Syria", *Middle East Monitor*, 17 February 2014; "Supplying the war in Syria", Strategypage.com, 26 February 2014; Will Fulton, Joseph Holliday and Sam Wyer, *Iranian Strategy in Syria* (Institute for the Study of War, May 2013); "Who is supplying weapons lifeline to Assad", BBC News, 14 June 2013; "Iran, Iraq, Syria sign agreement to boost transit cooperation", Press TV, 13 January 2013; Ian Black, "Iran confirms it has forces in Syria and will take military action if pushed", *The Guardian* (London), 16 September 2012.

country.[20] *One member of the Panel notes that the content of this paragraph is not directly related to the Panel's mandate.*

I. Assessment and analysis of prohibited Iranian activities

A. Summary of inspections of dual-use items

19. The Panel investigated 30 reported cases during the current mandate.[21] They are listed in the tables in annex II. Some of the Panel's inspection reports are pending. The main points from the Panel's investigations of those cases are discussed below. With one exception, the shipments were all interdicted in third countries.

20. All of the items are dual use in nature, and were interdicted by States on the basis of intelligence information that they were intended for use in the Islamic Republic of Iran's prohibited activities. The majority of cases are reported to be nuclear-related, a few having reported applications in the ballistic missile programme. Three of the items are controlled under the lists cited in the relevant resolutions; the others fall below control thresholds and were interdicted on the basis of catch-all provisions regarding end use or end user. With the exceptions of the items described in paragraphs 21 to 24 below, the Panel was not able to develop further information regarding possible relationships to entities designated under Security Council resolutions or prohibited activities. The cases underscore the challenges for States in identifying sensitive dual-use items that are not listed but could contribute to prohibited activities.

Carbon fibre case

21. On 6 June 2013, a State reported to the Committee that, in December 2012, authorities intercepted and seized a shipment of carbon fibre in transit aboard the *Shahraz*, en route to Bandar Abbas, Islamic Republic of Iran (annex II, table 2, number 24; see figure I).

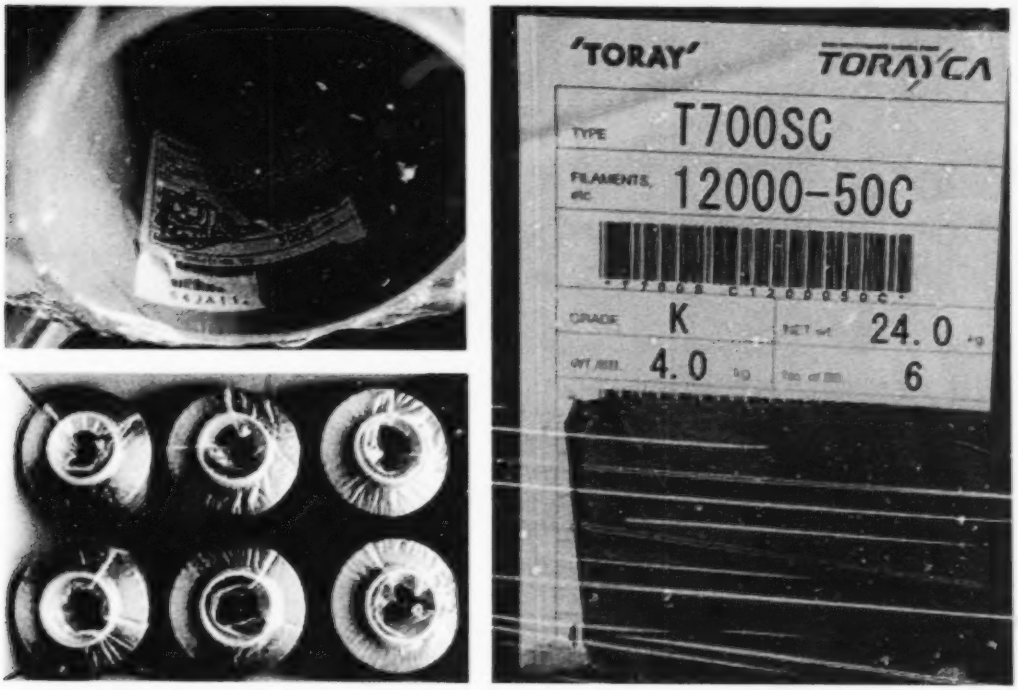
22. The *Shahraz* was carrying, inter alia, a consignment of 1,800 bobbins of carbon fibre, weighing a total of 7,200 kg. The carbon fibre was identified in packing materials and on documentation as T700SC-12000, a type of fibre manufactured by the Japan-based company Toray. Shipping documents identified the consignee as Hamidreza Afzalian Shirvan, Unit 2, No. 9 Biston 3 Alley, Biston St., Dastgheib Blvd., Mashad, Islamic Republic of Iran. According to commercial shipping databases, the *Shahraz's* registered owner is recorded as Kish Roaring Ocean Shipping Company PJS (Private Joint Stock) of the Islamic Republic of Iran. The Panel's research found the address and fax number of the shipper identified on the consignment's bill of lading to be associated with South Shipping Line Iran (SSL), which is designated under Security Council resolution 1929 (2010).

[20] Will Fulton, Joseph Holliday and Sam Wyer, *Iranian Strategy in Syria* (Institute for the Study of War, 2013); "IRGC Top Commander: transfer of experience Iran's only military aid to Syria", Fars News, 21 April 2014.

[21] The confidential inspection and investigation reports submitted by the Panel since June 2013 are listed in annex XI.

23. The Panel was able to inspect, photograph, and take a sample of the carbon fibre. The material was also sent to Toray, which confirmed, on the basis of forensic analysis, that the carbon fibre fell above the control thresholds established in lists cited in resolution 1929 (2010).

Figure I
Example of six bobbins, torn bar-code labels and torn packing materials



Photograph: Panel of Experts

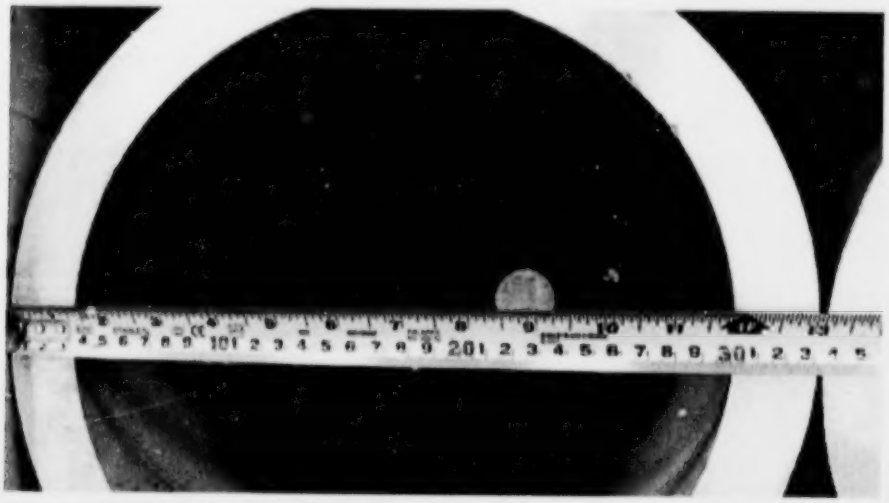
Aluminium alloy cases

24. In two cases, the items reported fall above control thresholds.

(a) Aluminium alloy 2024 cylinders (annex II, table 2, number 20; see figure II). These were shipped in the form of 21 cylinders about 3,000 mm long, 270 mm internal diameter and wall thickness 30 mm. Metallurgical analysis carried out by a Member State established that the cylinders were aluminium alloy 2024 T3.[22] The item is controlled under the lists cited in the relevant resolutions on the basis of composition and diameter of the cylinders.

[22] Although aluminium alloy 2024 of temper state T3 does not meet the ultimate tensile strength parameters in paragraph 2.C.1 of INFCIRC/254/Rev.8/Part 2 (30 June 2010), a technical note states that the phrase "In item 2.C.1 the phrase 'capable of' encompasses aluminium alloys before or after heat treatment". Therefore this alloy is controlled regardless of its temper state.

Figure II
Example of a shipment of 21 cylinders of aluminium alloy 2024 T3



Photograph: Panel of Experts

(b) Aluminium alloy 7075 rods (annex II, table 2, number 28). Metallurgical analysis by a Member State established that the rods were aluminium alloy 7075 T0. This item is controlled under the lists cited in the relevant resolutions on the basis of composition and diameter of the rods.

Inverter case

25. On 5 November 2013, a State reported to the Committee that a shipment of several hundred inverters was interdicted in November 2012 en route to Bandar Abbas, Islamic Republic of Iran (annex II, table 1, number 12).[23] Documentation identified an individual as the consignee in the Islamic Republic of Iran with no further information regarding the shipment's end user or end use. According to the manufacturer's specifications the inverters could operate at up to 400 Hz. Inverters have a wide range of industrial applications and those which operate in this range are not controlled under the relevant resolutions.

26. The Islamic Republic of Iran has in the past procured inverters capable of operating at frequencies of approximately 1,000 Hz which are necessary to drive IR-1 or IR-2M gas centrifuges at Natanz. The Panel's consultations with several industry and government experts suggest that upgrading some of the inverters in this shipment to operate at such frequencies is not technically difficult. The manufacturer stated that this was not possible. The Panel continues its consultations with experts and its report on this case is pending.

Machine tools case

27. On 23 January 2013, Spain reported that it had initiated an investigation of a Spanish company regarding transfers from Bilbao, Spain, to an alleged front company

[23] Also known as frequency changers or converters.

in Turkey of electrical discharge machine tools and their components (annex II, table 1, number 1). Electrical discharge machines are not included in control lists, except for machines having two or more rotating axes, which is a function of the software used. The end user of the tools was identified as Mapna Turbine Blade Manufacturing Engineering Co., in Tehran. Although export licences were denied by Spanish authorities, seven electrical discharge machines were exported in April 2010. Mapna Turbine Blade Manufacturing Engineering Co. is designated by Canada, the United Kingdom and Japan on grounds that it has ties to the Islamic Republic of Iran's prohibited nuclear and ballistic missile programmes. The Panel's report on this case is pending.

Cold pilger case

28. Cold pilgers (annex II, table 1, number 9) are used in industrial processes that require the production of metal tubes up to several metres long. Although the Panel could establish no connection between the documented consignee in the Islamic Republic of Iran (a freight forwarding company) and the country's prohibited activities, one State reported that the intended recipient of the pilger was an Iranian firm identified as Aluminat. Aluminat has been associated by several States with assisting "designated entities violate the provisions of United Nations and European Union sanctions on Iran and for directly supporting Iran's proliferation-sensitive activities".[24]

Bellows case

29. In this case (annex II, table 1, number 7), the Panel was unable to establish a link between the documented consignee and entities designated under relevant Security Council resolutions. However, the Panel recently obtained information that establishes a relationship between the consignee, Shahab Jamili of Nicaro Engineering, and the Islamic Republic of Iran's uranium enrichment programme. Jamili and Nicaro are identified in an indictment for their efforts to procure items on behalf of the Islamic Republic of Iran's prohibited nuclear activities.[25]

Documented consignees

30. In its investigations of 8 of the 30 cases listed in annex II, the Panel received no shipping documentation and therefore no documented information about the identity of the consignee or end user of the items in the shipments concerned. Where documentation was available, the consignee was identified as a trading company (five cases), freight forwarder (three cases), a named individual (eight cases) or a company connected with the petrochemical industry (two cases).

B. Analysis of items targeted for procurement

31. In addition to the inspections summarized above, the Panel gathered and analysed information provided by States and experts that are assessed to be

[24] Council of the European Union, Council Implementing Regulation No. 1264/2012 concerning restrictive measures against Iran (21 December 2012).

[25] United States District Court for the District of Massachusetts, USA v. Sihai Cheng, Seyed Abolfazl Shahab Jamili, Nicaro Eng. Co. Ltd. and Eyvaz Technic Manufacturing Company, Case No. 13-cr-10332, filed 21 November 2013.

important to the Islamic Republic of Iran's prohibited nuclear and ballistic missile activities.

Valves

32. The Panel had the opportunity to consult with industry, government and non-governmental experts regarding the special role of valves in nuclear fuel cycle applications. Valves subject to controls must have "a nominal size of 5 mm or greater; a bellows seal; and [be] wholly made of or lined with aluminium, aluminium alloy, nickel, or nickel alloy containing more than 60 per cent nickel by weight".[26] According to experts, such valves encompass a relatively small fraction of those necessary for industrial-scale nuclear facilities. Valves used in a nuclear reactor's primary circuit are most likely to be bellows-sealed and fall above control thresholds, though it is possible that valves used elsewhere in the reactor complex are also bellows-sealed.

33. Below-control threshold valves have numerous industrial applications, and are widely used in nuclear fuel cycle activities. They require special vigilance on the part of States to ensure that exports of such items are not diverted to prohibited activities. Some types of below-threshold valves used in nuclear activities bear similarities to those used in the petrochemical sector, for which the Islamic Republic of Iran has an established demand. This further complicates efforts to understand which items may be for prohibited purposes. Paragraph 61 below highlights the issue of the Islamic Republic of Iran's use of a petrochemical company as cover for procurement of valves for the Arak heavy water research reactor.

Carbon fibre

34. The Islamic Republic of Iran has been attempting to procure high-grade carbon fibre for use in the manufacturing of some of its centrifuge rotors. The material inspected by the Panel has a tensile strength of 4,900 MPa, and modulus of 230 GPa, which clearly falls above the control thresholds cited in resolution 1929 (2010). Such high-performance carbon fibre also has a number of commercial applications, in particular in the aerospace industry.

35. The Islamic Republic of Iran is also seeking carbon fibre of lower technical specifications. In the cases described in annex III, these included carbon fibre tow, fabrics, and carbon fibre that has been impregnated with resins (pre-pregs). Stated end uses included strengthening and repair of concrete structures, the manufacture of wind-turbine blades, automotive applications, and for electrical transmission cables. The use of carbon fibre for reinforcing concrete structures is an expensive option. Glass fibre is less expensive and more commonly used.

Aluminium

36. The Islamic Republic of Iran's demand for raw and semi-finished materials for both prohibited and legitimate industrial activity is well established. The Panel investigated over the past year three shipments of high-grade 7000-series aluminium that the Islamic Republic of Iran is assessed by some experts to lack the capability to manufacture to sufficient quality indigenously. The country is, however, assessed to be capable of manufacturing 6000-series aluminium alloy, which is a commonly

[26] INFCIRC/254/Rev.8/Part 2 (30 June 2010).

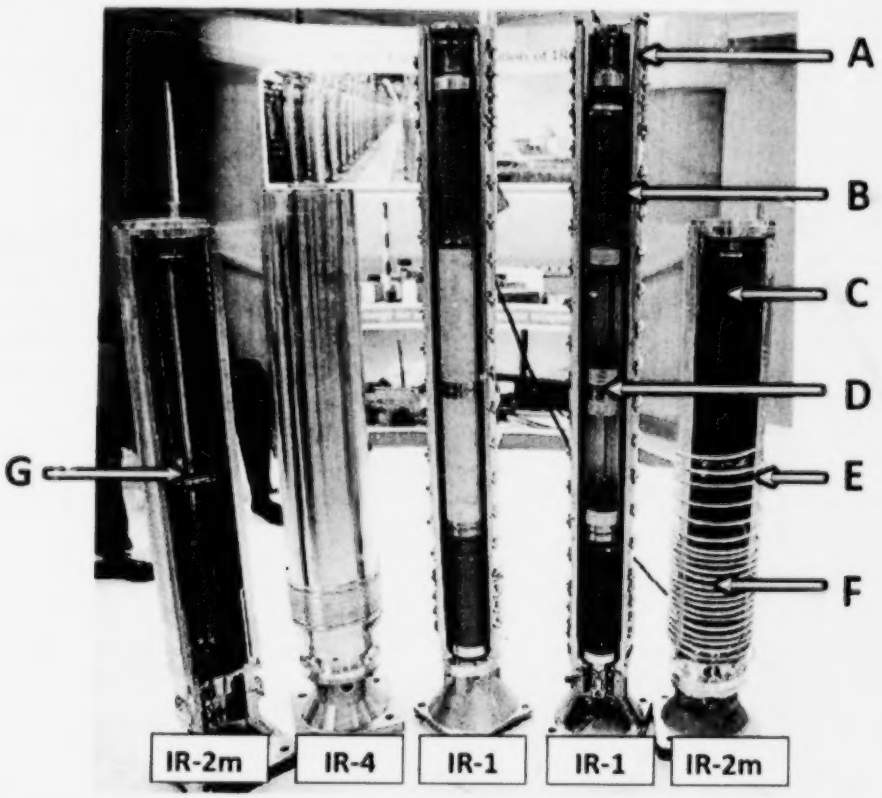
produced metal with widespread commercial applications. Prohibited applications include the outer casings of centrifuges. A number of States have expressed to the Panel their concerns regarding the role of the Islamic Republic of Iran's State-owned aluminium company in supporting the country's prohibited nuclear activities, in particular by supplying aluminium to the Iran Centrifuge Technology Company, known as TESA. In paragraphs 76 and 77, the Panel explores the Islamic Republic of Iran's use of barter to obtain aluminium without purchasing it on the open market.

Other critical items

37. The Panel notes that there remains uncertainty among many States regarding the key components for the Islamic Republic of Iran's centrifuges, their approximate dimensions and whether the country is assessed to be able to produce items indigenously or must import them. Figure III shows a grouping of three different centrifuge types recently displayed by the Islamic Republic of Iran. The annotations seek to identify a few key components, their approximate dimensions, and the consensus among experts regarding whether the items are indigenously produced or imported, or whether this is not known.

38. In addition to the items described above, the Islamic Republic of Iran is reported to seek abroad, inter alia, vacuum equipment, maraging steel, specialized oils (Fomblin oil for example), and magnetic tape.

Figure III
Iranian centrifuges annotated



Photograph: Siamak Ebrahimi, published by Tasnim News Agency

Note: This figure identifies centrifuge components, their approximate dimensions and likely materials. The centrifuges were displayed by the Atomic Energy Organization of Iran at a conference of the Parliamentary Union of the Organization of Islamic Cooperation, held in Tehran in February 2014.

A: IR-1 outer casing: assessed to be manufactured from 6000-series aluminium indigenously; approximately 160-180 mm outer diameter; approximately 20 mm wall thickness

B: IR-1 centrifuge rotor: assessed to be 7000-series aluminium; approximately 100 mm outer diameter; 1 mm wall thickness; 40 cm in length; **7000-series alloy imported**; **indigenous manufacture**

C: IR-2m rotor: carbon fibre; approximately 140-150 mm outer diameter; **material imported**; **fabrication of rotor indigenous**

D: IR-1 bellows: maraging steel; approximately same wall thickness as centrifuge rotor; contains single convolution; **maraging steel imported**; **bellows manufactured indigenously**

E: IR-2m outer casing: assessed to be 6000-series aluminium

F: Aluminium coil for cooling water

G: IR-2m bellows

C. Summary of inspection and investigations of conventional arms and related materiel

39. During the current period there was only one officially reported case of a transfer by the Islamic Republic of Iran of conventional arms and related materiel and one case on which the Panel was briefed, but which was not formally reported to the Committee.

Case 1: seizure of arms aboard the *Klos C*

40. On 5 March, the Panamanian-flagged cargo vessel, *Klos C*, was interdicted in the Red Sea by Israeli naval authorities. Cargo found aboard the vessel included 40 M-302 rockets, 181 120-mm mortars and approximately 400,000 rounds of ammunition. The cargo was concealed in shipping containers among bags of cement. According to Israeli authorities, 100 containers, including those containing the armaments, were loaded on to the vessel in the Iranian port of Bandar Abbas, and 50 additional containers were loaded aboard the vessel in the Iraqi port of Umm Qasr. Iraqi officials informed the Panel that the vessel was empty when it arrived in Umm Qasr. The Panel has conducted an inspection of the seized items, and received documentation from relevant authorities. It is continuing to investigate this matter and will submit its report to the Committee at the earliest possible date.

Case 2: update regarding seizure of high explosives reported by Kenya

41. The Panel was briefed by Kenyan authorities, analysed court proceedings, and received information from another Member State regarding the discovery in June 2012 of a cache of RDX explosives transferred to Kenya. The case involved two Iranians, one of whom claimed a connection to IRGC, and a third individual based in the Islamic Republic of Iran allegedly connected to IRGC and identified as the operation's support.[27] Following their arrest, one of the Iranians led the Kenyan authorities to the cache of explosives consisting of 15 kg of RDX buried on a Mombasa golf course.[28] According to a State, it is likely that the explosives were brought into the country aboard a vessel of the Islamic Republic of Iran Shipping Lines (IRISL) that had docked in Mombasa.[29] This allegation has not been further substantiated. The two Iranians were sentenced in May 2013 to life imprisonment in Kenya for possession of explosives. No further information or follow-up related to the case is expected.

D. Analysis of developments in conventional arms transfers

Ongoing arms transfers

42. During the current mandate, only one incident involving the transfer of conventional arms was formally reported. This does not necessarily reflect an actual decline in the quantity of arms being transferred by the Islamic Republic of Iran, but

[27] Ahmad Abolfathi Mohammed and Seyed Mansour Mosavi. In the Chief Magistrate's Court at Milimani Law Courts, criminal case No. 881 of 2012.

[28] The police officers testifying at the trial indicated that the total amount of explosives brought in the country was close to 100 kg.

[29] Kenyan authorities identified two Islamic Republic of Iran Shipping Lines vessels having docked at Mombasa at the same time: M/V *Pardis* (IMO 9284142) and M/V *Salis* (IMO 9283021).

could be the result of a number of factors, including the country's need to use supply routes in a manner that is less likely to result in interdictions, better concealment methods, or the lack of vigilance in other States. Member States and the media continue to report arms transfers from the Islamic Republic of Iran, including to the Syrian Arab Republic, Gaza, the Sudan and Bahrain.[30]

43. Several States and some local authorities in Iraq indicated to the Panel that a likely supply route of arms from the Islamic Republic of Iran to the Syrian Arab Republic involves the use of Iraqi territory, primarily by air, but also by land. Iraqi government officials have consistently denied such allegations and informed the Panel that they make regular inspections of flights between the Islamic Republic of Iran and the Syrian Arab Republic. According to Iraqi officials, from March 2012 to the present, 64 such checks were conducted and turned up no evidence of prohibited cargo.

Alleged transfers to Bahrain

44. In addition to the cases described above, the Panel is aware of other incidents of alleged arms transfers by the Islamic Republic of Iran. In one, Bahrain's Coast Guard and police jointly intercepted a vessel in Bahraini coastal waters, seizing assorted explosive materials, including what was described as Iranian-produced bombs.[31] One Bahraini official described the incident as an "attempt to smuggle explosives and firearms" into Bahrain, and attributed the origin of this attempt to the Islamic Republic of Iran on the basis of statements made by the suspects as well as markings on some of the items seized.

45. Bahrain's chief prosecutor gave a statement describing the Islamic Republic of Iran's role in the incident. Five of the arrested "also confessed that they had travelled to Iran and received training by Iranian personnel at Iranian Revolutionary Guard camps at various locations in Iran. They also confessed having received sums of money after training. Their confessions also included detailed accounts of how they received the seized explosives, guns, munitions and equipment from a boat on the high seas manned by an Iraqi crew, and stated that they reached that boat by using coordinates which were given to them, all upon the instructions of the leader Ali Al-Moussawi and other group leaders in Bahrain and abroad. Those instructions also included concealing the smuggled weapons, explosives and tools until the zero hour, to be used at that time in carrying out their plans, targeting vital sovereign and security installations and assassinating certain figures".[32]

[30] Daoud Shihab, media spokesman for the Palestinian Islamic Jihad (May 2013), said "All the weapons in Gaza are provided by Iran be they weapons intended for Hamas Movement or for the PIJ"; quoted in Asmaa al-Ghoul, "Palestinian Islamic Jihad: Iran supplies all weapons in Gaza", *Al-Monitor*, 14 May 2013; Sheikh Khalid bin Khalifa al Khalifa, Chairman of the Suhra Council's Committee on Foreign Affairs, Defence and National Security of Bahrain, said "Iran's export of destruction and horror to Bahrain" signals Iran's "intent to undermine the security and stability of the region in order to advance its security interests"; quoted in Mohamed al Jayousi, "Iran's weapons smuggling in Gulf region undermines stability", *Central Asia Online*, 23 January 2014.

[31] Habib Toumi, "Bahrain foils weapons smuggling attempt", *Gulf News*, 30 December 2013.

[32] "Public prosecution issues statement on recently foiled terror arrests", Bahrain News Agency, 2 January 2014.

E. Analysis of ballistic missile activities

46. Analysis of the Islamic Republic of Iran's ballistic missile programme remains a challenge. With the exception of several launches, periodic displays of hardware and one recent revelation of a new ballistic launch facility, the programme is opaque and not subject to the same level of transparency as the country's nuclear activities are under IAEA safeguards. The following provides the Panel's assessment of developments over the past year with respect to the Islamic Republic of Iran's ballistic missile and space launch activities.

Status of the Sejil

47. The Sejil (Ashura) is the Islamic Republic of Iran's longest-range solid-fuelled ballistic missile. Its last reported test was carried out in 2011; experts have suggested a number of possible explanations for the absence of subsequent tests. There may be difficulties procuring missile components or securing a reliable supply of ingredients for solid fuel, hence a decision not to deplete a limited store of missiles with tests. Another possibility is that the Islamic Republic of Iran has decided to prioritize resources to more established missiles such as the Shahab series. It cannot be excluded that the Islamic Republic of Iran is satisfied with the Sejil's performance and feels no further tests are necessary. It may also have decided to suspend further testing which could be interpreted as inconsistent with the spirit of the E3+3 negotiations. The Panel has no information about the number of operational Sejil missiles in the Islamic Republic of Iran's arsenal; the missile is assessed by experts to require further testing.

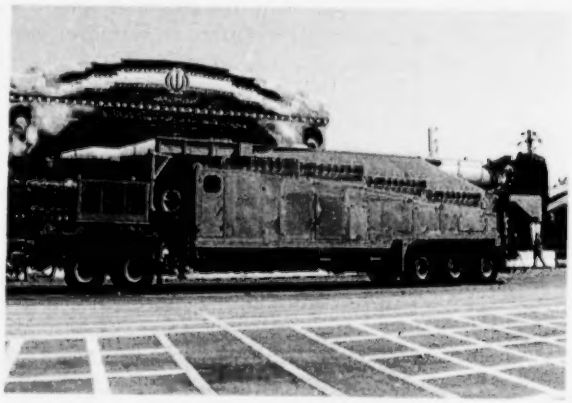
Sejil transporter erector launcher vehicles

48. One indication that development of the Sejil is continuing is the display of 20 Sejil transporter erector launcher vehicles (TEL) at a 2013 military parade for the first time (figures IV and V). Transporter erector launcher vehicles enhance the mobility of missiles while decreasing their vulnerability. One expert noted that "The number of TELs at Iran's disposal is strategically crucial as the more ballistic missiles it can launch in a single wave the greater its chance of overwhelming defensive systems".[33]

[33] Jeremy Binnie, "Iran displays numerous ballistic missile launchers", *IHS Jane's Defence Weekly*, 29 May 2013.

Figures IV and V

Sejil missile transporter erector launcher vehicles at a military parade in May 2013



Photograph: Ministry of Defence of the Islamic Republic of Iran, as published by *IHS Jane's Defence Weekly*

Shahab missiles

49. On 10 February 2014, the Islamic Republic of Iran test-fired the Barani, described by the Ministry of Defence as "a new generation of long-range ballistic missiles capable of carrying multiple re-entry vehicle payloads".[34] Experts identified it as a variant of the Shahab (Ghadr 1) and questioned its alleged multiple re-entry vehicle capability, suggesting instead that it carried sub-munitions. The Islamic Republic of Iran reportedly first announced this capability in 2006.[35] Aside from the Barani, the Islamic Republic of Iran announced no tests of new ballistic missiles.

50. One State recently informed the Panel that the Islamic Republic of Iran tested Ghadr 1 missiles on two occasions over the past year, in November 2013 and January 2014. The Panel has no additional information in this regard.

New missile launch facilities

51. According to published reports and experts consulted by the Panel, the Islamic Republic of Iran has continued to expand its rocket launch capabilities at the Semnan Space Centre to accommodate larger missiles and space launch vehicles, including possibly the Simorgh 3 space launch vehicle.[36] Some experts have suggested that as the launch site construction is finished work on the Simorgh project will intensify.

52. A new missile launch site 40 km from the city of Shahrud was identified in August 2013 (figure VI). IHS Jane's published analysis of satellite imagery of this, suggesting that the new launch facility is capable of testing long-range ballistic missiles. Analysts stated that "This site could be a facility for launching satellites into orbit. However, Iran is already building at least one other site for this purpose and, looking at the satellite imagery we have got, we believe that this facility is

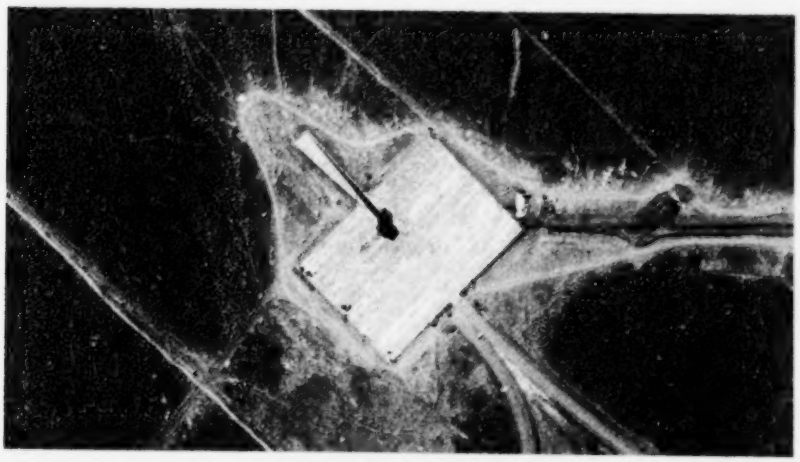
[34] Jeremy Binnie, "Iran announces new missile tests", *IHS Jane's Defence Weekly*, 13 February 2014.

[35] Ibid.

[36] Charles Vick, "Iranian expanded first and building second space launch centre", GlobalSecurity.org, 26 November 2013.

most likely used for testing ballistic missiles."[37] This assessment is based on a number of factors, including the site's current lack of a liquid fuel storage facility, the orientation of the launch pad (150 degrees north), and the location and arrangement of buildings.[38]

Figure VI
Launch pad at Shahrud facility



Photograph: DigitalGlobe, as published by IHS Jane's.

Space launch activities

53. In February 2014, the Islamic Republic of Iran displayed two satellites developed by Malek Ashtar University. A modification of the Navid satellite, the Tadbir and Khalij-e-Fars satellites are reportedly intended to support secure wireless communication.[39] One State recently informed the Panel of a Safir space launch vehicle launched in March 2014. This has not been reported in open sources and the Panel has no additional information regarding the launch at this time.

Procurement priorities

54. The Panel continues to receive limited information regarding procurement efforts by the Islamic Republic of Iran for its ballistic missile-related activities. According to one State, there is no change in procurement patterns for missiles. Among the most important items the country is reportedly seeking are metals, as well as components for guidance systems and fuel. Similarities between the Islamic Republic of Iran's ballistic missile and space programmes can make it difficult for States to distinguish the end uses of procured items.

[37] Ben Farmer, "Iran launch site 'likely for testing ballistic missiles', analysts say", *The Telegraph Online*, 7 August 2013.

[38] The location of the site and angle of the launch pad allow missiles to be fired on a trajectory in which individual rocket stages would land within Iranian territory and the re-entry vehicle land in the Indian Ocean. The Islamic Republic of Iran would thus be able to maximize the gathering of telemetry information. See Joseph S. Bermudez, Jr., "Second Iranian space-launch centre revealed", *IHS Jane's Defence Weekly*, 6 August 2013.

[39] "Iran unveils new home-built satellites", Iranian Students' News Agency, 3 February 2014.

II. Methods of procurement and financing

A. Procurement methods and challenges

55. The cases reported to the Committee during this mandate underscore the challenges for States to distinguish between legitimate procurement by the Islamic Republic of Iran for commercial purposes and prohibited activities. Three trends capture the complexity of this issue. The Islamic Republic of Iran has demonstrated continuing demand for high-quality dual-use goods, both above and below control thresholds. Procurement of non-listed, dual-use items as substitutes for controlled items is ongoing. The Islamic Republic of Iran has also demonstrated a growing capability to produce key items indigenously. The Panel explores various avenues for procurement, including a case in which the country's petrochemical sector was used as cover for nuclear-related procurement. Finally, the Panel highlights a reported slowdown in procurement by the Islamic Republic of Iran and the potential impact of the Joint Plan of Action on its procurement.

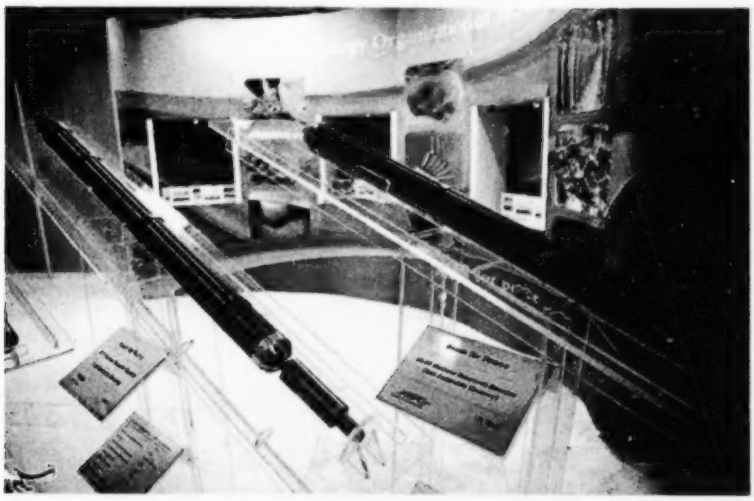
Controlled and high-quality items

56. Items recently investigated by the Panel include controlled valves, carbon fibre and aluminium alloy. These indicate that the Islamic Republic of Iran continues to seek key items abroad, preferably from established, high-quality suppliers. The carbon fibre case investigated by the Panel, described in paragraphs 34 and 35 above, illustrates this point. The Islamic Republic of Iran's attempts to procure aluminium alloys 7075 and 2024, both controlled items with applications in centrifuges and ballistic missiles, are other examples.

Below-threshold procurement

57. The Islamic Republic of Iran continues to target for procurement dual-use items that fall below control thresholds, many of which have numerous industrial applications. Some of these items can be upgraded or used for component parts in indigenously produced items. Two cases under investigation by the Panel could fall under this category. They include inverters and machine tools, described above in paragraphs 25 to 27. Although the Panel has not yet concluded its investigation, preliminary technical analysis by experts suggests this is possible. In the machine tools case, a company shipped an electrical discharge machine tool to the Islamic Republic of Iran, which could have applications in prohibited nuclear activities. An electrical discharge machine tool with two or more contouring rotary axes that can be coordinated simultaneously for contouring control is prohibited by INFCIRC/254/Rev.8/Part 2. The machine exported to the Islamic Republic of Iran had only a single rotating axis control but, according to the company, software can be installed to upgrade the machine and allow for three rotating axes control.

Figure VII
Mock-up of IR-40 reactor fuel assemblies



Photograph: Siamak Ebrahimi, Tasnim News

Indigenization

58. The Atomic Energy Organization of Iran regularly displays items manufactured domestically as part of its nuclear programme, including valves, bellows and other component parts of centrifuges. The quality of such equipment is not known. According to Member States and experts, the Islamic Republic of Iran seeks to reverse-engineer key components once procured abroad, including, for example, inverters. The Panel notes that it has inspected more shipments of raw materials than under previous mandates. The photograph (figure VII), taken at a display in February 2014 by the Atomic Energy Organization of Iran, is reportedly of fuel assemblies for the IR-40 Arak heavy water reactor.

Front companies

59. The Islamic Republic of Iran continues to make extensive use of front companies to procure items for prohibited activities. Some companies may be established solely for the purpose of prohibited procurement; others may also be engaged in legitimate business. It may be difficult for States, in particular those seeking to promote the ease of establishing new companies, to identify those that are engaged in procurement for prohibited activities in the Islamic Republic of Iran, as such entities constitute a tiny fraction of business entities.

60. Access to adequate and accurate information about legal and beneficial ownership of companies is critical to effective implementation of financial sanctions on the Islamic Republic of Iran. The need for such information has also been highlighted by the Financial Action Task Force (FATF) as central for anti-money-laundering and countering terrorism financing. FATF has noted that "Member States have to ensure that company registries are accessible, maintained up to date and as

much as possible include information about legal ownership, shareholders, and beneficial owners".[40]

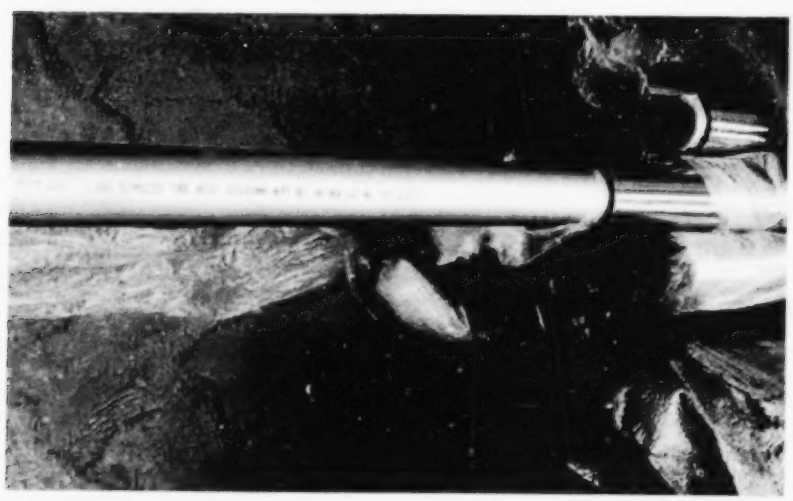
Use of other industries as procurement cover

61. Pursuant to its investigation of a case reported during the last mandate, the Panel recently obtained documentary evidence of the Islamic Republic of Iran using its petrochemical sector as a means of obscuring the end use and end user of items procured for the Arak reactor.[41] The document is part of legal proceedings in the reporting State. It contains detailed technical parameters for the design, procurement and construction of the systems that comprise the Arak reactor complex. In a section on procurement, the document states that the owner of the project is to be defined as "Chemical and petrochemical company" and the purchaser "Chemical and petrochemical company or its nominated representative" (annex IV). The document was found among the possessions of members of a procurement network established to source items necessary for the reactor.

Concealed shipment

62. In the course of the inspection of a shipment of stainless steel pipes (annex II, table 2, number 26), a set of 10 titanium tubes was discovered packed inside 10 of those pipes (figure VIII). The Panel's investigation into this reported incident is ongoing.

Figure VIII
Titanium tube concealed inside stainless steel pipe



Photograph: Panel of Experts

[40] FATF Recommendation 24 requires countries to ensure that sound and up-to-date basic information on the legal ownership of companies is available in the corporate registry and is held by companies. This should include the company name, proof of incorporation, legal form and status, the address of the registered office, basic regulating powers (for example, memorandum and articles of association), and a list of directors. This information held by the registry should be made publicly available. See *FATF Draft Guidance on Transparency and Beneficial Ownership* (FATF/PDG (2014)).

[41] See the Panel's final report of 2013 (S/2013/331, paras. 18-22).

Freight forwarders

63. The Panel has noted previously the role freight forwarders could play in preventing illicit procurement.[42] In three cases inspected under the current mandate, names of freight forwarders were recorded on shipping documentation in the place of consignors or consignees. Such practices are not necessarily illegal or unusual for legitimate trade, but could be used by the Islamic Republic of Iran to conceal the provenance and destination of shipments. The Panel notes that the International Federation of Freight Forwarders Associations has issued a notice to its members warning about the increased use of counterfeit bills of lading in connection with shipments to and from the Islamic Republic of Iran.[43]

Role of carriers

64. Documentation available to the Panel showed that, in at least five cases, carriers accepted shipper-owned and -sealed containers for transport to the Islamic Republic of Iran. Although such practices are common in connection with legitimate trade, some carriers enhance their vigilance and will not accept shipper-owned and -sealed containers originating in the Islamic Republic of Iran or destined for that country.[44]

Possible slowdown in procurement

65. Several States noted that procurement associated with the Islamic Republic of Iran's prohibited activities appears to have slowed over the past six to nine months. One State that has previously undertaken multiple interdictions related to the Islamic Republic of Iran noted that only two such seizures were made in the second half of 2013. A second State, which tracks such issues closely, also reported that with only a few exceptions, illicit procurement appeared to be less active.

66. This slowdown could be explained by the Islamic Republic of Iran using more opaque means of procurement, or States reporting less actively. It may also be the case that the Islamic Republic of Iran has deliberately slowed the pace of procurement, possibly coinciding with a change in the political climate under President Rouhani and the initiation of the Joint Plan of Action. There is generally a lag in reporting interdictions to the Panel of anywhere from a few months to several years. This reporting gap makes it difficult for the Panel to make its own assessment regarding the impact of the Joint Plan of Action on recent procurement trends.

Procurement and the Joint Plan of Action

67. Some States have expressed uncertainty regarding the status of Security Council sanctions in the context of the Joint Plan of Action, in particular concerning procurement for nuclear activities that are currently prohibited. Uncertainty concerning such procurement could grow in the event of a comprehensive agreement under which the Islamic Republic of Iran may maintain certain nuclear activities, while Security Council sanctions continue to prohibit the supply of

[42] S/2013/331, para. 116.

[43] See International Federation of Freight Forwarders Associations, E-Flash newsletter No. 57 (5 July 2013), para. 8, "Increased use of counterfeit bills to and from Iran".

[44] See "General rules for cargo acceptance from Iran", Maersk Line, available from http://my.maerskline.com; "Rules for goods to and from Iran", Safmarine, available from http://mysaf2.safmarine.com.

proliferation-sensitive materials.[45] Members of the private sector are also closely following developments with the Islamic Republic of Iran and are eager to resume normal trade with the country. Many have begun to rebuild commercial ties to the Islamic Republic of Iran and expressed optimism that the Joint Plan of Action would quickly sweep away barriers to expanded trade.

B. Procurement financing

68. The Islamic Republic of Iran faces substantial difficulties accessing the international financial system because of the sweeping impact of unilateral sanctions. For this reason, it uses a variety of channels for financing procurement including both banking and non-banking methods. Distinguishing between financial transactions connected with legitimate trade and with procurement for prohibited activities remains a challenge for States. The Panel does not have information to confirm that any of these channels are specifically used for financing prohibited activities, but they could be used for this purpose.

69. Member States, when implementing requirements for ensuring vigilance when business is done with Iranian entities, should take into account the possible mechanisms for financial transactions described below and in annex V.

1. Use of banking channels to finance procurement

Transactions through institutions in neighbouring States

70. The Panel continues to receive information from States and financial institutions that Iranian companies could operate through trading companies or shell companies in neighbouring States.[46] Depending on local regulations, such shell companies would have a mix of Iranian shareholders (resident outside of the Islamic Republic of Iran) and local shareholders, or exclusively local shareholders acting on behalf of the Iranian parties (as the presence of Iranian shareholders would trigger enhanced due diligence by banks). These shell companies open accounts at an international bank in the relevant neighbouring State. The bank undertakes appropriate due diligence (requesting, for example, shareholder details, incorporation documents and source of funds), but the shell companies do not reveal their true purpose. Trading companies may have operated for many years with established bank accounts and have no record of connections with the Islamic Republic of Iran.

71. One scenario described to the Panel suggested that trading and shell companies could place orders for goods from the United States or Europe, acting on behalf of Iranian companies, but with the orders making no reference to the Islamic Republic of Iran. To pay for the orders, the Iranian companies would transfer funds to a branch of an Iranian bank in a neighbouring State. Funds are then transferred from that branch to an account held by the trading or shell company at a branch of an

[45] One member of the Panel considers that an additional challenge for States, obliged to implement relevant Security Council resolutions, is maintenance of transparency and accountability by the E3+3 and the Islamic Republic of Iran during negotiations for a comprehensive solution.

[46] The term "trading company" is used here to mean an established business buying and selling different types of products from and to businesses located overseas. Such a company is not an end user. A "shell company" is used here to mean an entity that may exist only in name and which has been set up specifically to carry out procurement by Iranian entities, while shielding their involvement.

international bank in the State concerned, but in a way that obscures the Iranian bank's role. The transfer could take place in cash or through the trading or shell company's account with a local, non-Iranian intermediary bank. The international bank thereby has no information that the transaction has any Iranian connection. The trading or shell company can then instruct that payments be made to the bank account of the companies in the United States or Europe that supply the goods.

Possible role of small Iranian banks

72. The majority of State-owned and large Iranian financial institutions are excluded from the international financial system as a consequence of unilateral sanctions. Several States, financial institutions and commercial entities highlighted the role of small banks in financing legitimate transactions. Some of those banks were known for active outreach activity to generate new business overseas. A commercial entity reported that it received payments for goods sold to companies in the Islamic Republic of Iran by means of letters of credit issued by one such Iranian bank. States have highlighted the possibility that illegitimate trade could be carried out under legal transactions.

Overseas accounts held by the Central Bank

73. The Central Bank of the Islamic Republic of Iran is not designated under Security Council sanctions, but resolution 1929 (2010) refers to the need for vigilance over financial transactions involving the Bank. The Central Bank maintains accounts in local currencies in certain States for the purpose of receiving payments for sales of oil or other energy products and transacting legitimate trade in the local currency. The sums in such accounts can be on the order of billions of United States dollars. One State reported that in 2011 a local businessman, using falsified documentation, fraudulently transferred sums equivalent to about $1 billion from the Central Bank account to several different States overseas. Their end use is not known to the Panel. This example demonstrates the need for adequate vigilance to prevent the potential abuse of this method of financing legitimate trade.

2. Use of non-banking channels to finance procurement

Hawala/money exchanges

74. In the past, private companies and Member States have described the role of hawala in small transactions. A legal expert who has handled cases related to hawala transactions informed the Panel that hawala brokers or money exchangers may also be used by large companies to effect payments equivalent to millions of dollars from entities in the Islamic Republic of Iran. Although the practice is not illegal within the State concerned, it is risky and expensive.

75. An example provided by that expert described a transaction between an Iranian and an overseas company for the purchase of goods worth several million euros. The foreign company received a down payment of 30 per cent through customary banking channels. He noted that such channels for transferring funds out of the Islamic Republic of Iran are limited and frequently unavailable, so that the balance of the subsequent payment for the goods had to be made by the Iranian customer through a money exchanger in Tehran. The money exchanger arranged to deliver the outstanding balance in a series of payments using a partner in the State concerned,

with cash delivered by hand or deposits made directly into the company's bank account from third parties. The methods of balancing the payments are not known.

Barter

76. Barter trades can provide a means for the Islamic Republic of Iran to undertake legitimate trade without resorting to the international financial system, in particular for commodities or raw materials. During the current mandate, the Panel consulted with one firm that has engaged in such trades with the Islamic Republic of Iran, as well as with a number of experts in the private sector experienced in such trading practices. The Islamic Republic of Iran has legitimate demand for raw materials and there are no provisions under Security Council resolutions that explicitly prohibit such trades.

77. During its enquiries, the Panel obtained information detailing specific barter trades involving aluminium between an Iranian entity and a private sector firm. They serve to illustrate how such trades can be structured in a manner that allows the Islamic Republic of Iran to acquire significant quantities of a raw material, in this case alumina, without purchasing it through a financial system that is increasingly closed off to Iranian entities, in particular to State-owned enterprises. Annex VI describes one of the transactions in greater detail.

Forfaiting

78. One Member State drew the Panel's attention to the role of forfaiting houses in financing legitimate procurement. Forfaiting is a form of international supply chain financing in which forfaiting houses pay the supplier and then take money from the purchaser. They assume all political and commercial risks and, for this reason, can be an expensive way to conduct trade.[47] They operate largely outside the banking system. One expert noted that payment using forfaiting houses was used until two years ago when they became the target of unilateral sanctions. The Panel has also investigated two cases of illicit procurement in which forfaiting methods were used by parties involved.

III. Sanctions implementation challenges

A. Export controls

79. Export control and customs enforcement remain the major instruments of effective sanctions implementation. Member States consulted by the Panel during the reporting period demonstrate a growing awareness of necessary export control and customs procedures. Most States consulted by the Panel have substantial export control legislation and regulations in place.

80. States emphasize the importance of coordination in the implementation of export control and customs. Such coordination takes several forms, including intragovernmental, between Member States in the sharing of information, and between States and the private sector.

[47] The website of the International Forfaiting Association, the international trade association for institutions engaged in forfaiting, provides details on the business (www.forfaiters.org).

81. Major challenges to effective implementation of sanctions are insufficient capacity, inadequate training of customs or export control authorities, difficulties identifying dual-use items, identification of suspicious end users or end uses, and issues related to intangible technology transfer.

82. Some States believe that the absence of significant trade with the Islamic Republic of Iran, the absence of production of sensitive goods, and geographic distance from the Islamic Republic of Iran would make them unlikely targets for procurement. Such States may be unaware of the Islamic Republic of Iran's complex procurement techniques.[48]

83. **Identification of proliferation-sensitive items**. Most States rely to different degrees on electronic risk management systems as part of their export control. These systems can be of varying quality. Some rely only on control lists that are insufficient to identify below-threshold items. Additional risk identifiers should be included, such as information regarding end use and end users, and denials.

84. **Differences in implementation of catch-all provisions**. The interpretation of catch-all provisions varies among States. Some cases investigated by the Panel illustrate the consequences of different interpretations by States which lead to different decisions as to whether to interdict. Another element in the effective implementation of catch-all provisions is the timely sharing of available relevant information among concerned States.

85. **Intangible technology transfer**. Universities and research centres that have traditionally hosted large numbers of students and scientists from abroad are increasingly vigilant regarding the risks of intangible technology transfer to Iranian nationals. One State, which did not have a policy to control access to sensitive areas of study, reported a significant increase in applications by Iranian students, the number of which in previous years had been close to zero.

B. Private sector internal compliance procedures

86. During this mandate, the Panel consulted with a number of manufacturers whose products were identified in shipments inspected by the Panel. Those companies maintain robust internal compliance procedures and have a high awareness of proliferation risks. One of the issues identified in the course of internal enquiries by the companies was the role of overseas distributors.

87. In one case, the company required all recipients of its product in certain countries to submit a letter of assurance for each shipment. The letter of assurance forbade the reselling, retransfer or re-export of the product without the prior consent of the company. However, the recipient and its subcontractors misunderstood or failed to comply with the letter of assurance. In a second case, the company concerned had a written arrangement with its distributor to ensure that its equipment would not be transferred to the Islamic Republic of Iran. In both cases, the written arrangements proved ineffective and could not preclude the delivery of the items to unintended recipients.

[48] One State, geographically distant from the Islamic Republic of Iran and with a low volume of bilateral trade, informed the Panel that one of its manufacturers was approached by the Islamic Republic of Iran to export many tons of steel plates in 2013. The manufacturer had little experience in such exports. Although steel plates are not a controlled item, this procurement may suggest that the Islamic Republic of Iran is seeking to develop new sources of goods or materials from countries with relatively little experience of dealing with relevant Security Council sanctions.

C. Incident reporting challenges

88. Member States continue to inform the Panel that domestic legal prosecutions hinder their ability to report alleged violations to the Committee. However, two States, despite similar legal considerations, have found ways to report incidents and provide information to the Committee and the Panel, while maintaining confidentiality as appropriate.

89. The Panel notes that in three of the cases reported to the Committee items were confiscated by the State because they were suspected to be used in Iran's chemical weapons programme, including in manufacturing Sarin gas. The Panel understands that such cases are not addressed by current Security Council resolutions concerning the Islamic Republic of Iran.

90. The Panel's experience has shown that the reporting requirements and timetables set forth in resolution 1929 (2010) and prior resolutions do not work well in practice. No State has ever reported an incident within five working days of an inspection of interdicted items, and few submit second or subsequent reports. Different reporting requirements in the resolutions might create uncertainty among States regarding what and when they report to the Committee. Annex VII further illustrates the challenges faced by States when reporting incidents of non-compliance.

91. The Panel reiterates the importance of States understanding that reporting does not indicate weaknesses in their control measures, or ineffectiveness in implementation of sanctions. On the contrary, reporting attempted or alleged violations of sanctions indicates that States are implementing sanctions effectively.

D. Disposal of seized items

92. When interdicting and seizing items pursuant to paragraphs 14 and 15 of resolution 1929 (2010), States face challenges such as costs, and safe and secure storage of potentially hazardous materials. States may be reluctant to stop shipments and dispose of items where there are concerns about the legal and financial implications of such actions.

93. Because of these challenges, and on the basis of their interpretation of paragraph 16 of resolution 1929 (2010), some States have returned seized items to the originating State. On several occasions, some States have disposed of interdicted shipments before the Panel has carried out an inspection. The Panel encourages States to wait until an inspection by the Panel has been conducted before disposing of seized shipments.

E. Designations of individuals and entities

94. During the current mandate the Panel has continued to study the practical impact of designations of individuals and entities under the relevant resolutions. All such individuals and entities are connected with the Islamic Republic of Iran's prohibited activities, including senior members of the Islamic Revolutionary Guard Corps and certain IRISL entities.

Travel by designated individuals

95. The Committee has not been notified during the mandate period of any reported violations of the travel ban. The Panel is unable to establish whether this is because designated individuals have not travelled, or such travel has not been identified and reported. However, the Panel was informed that Major General Qasem Soleimani, Commander of the IRGC Quds Force, has travelled regularly over the mandate period to at least two of the countries neighbouring the Islamic Republic of Iran.[49] Then-Brigadier General Soleimani is designated under resolution 1747 (2007).

Khatam al-Anbiya construction company

96. Khatam al-Anbiya (KAA) is designated under resolution 1929 (2010) as an IRGC-owned company involved in "large-scale civil and military construction projects and other engineering activities". The designation further notes that KAA subsidiaries were "heavily involved in the construction of the uranium enrichment site at Qom/Fordow". In January 2014 a media report published a document containing a directive from the Special Economic Directives Division of the Supreme National Security Council of the Islamic Republic of Iran ordering Iranian banks and State firms to facilitate the establishment of new front companies related to Khatam al-Anbiya in order to help IRGC evade United Nations and other sanctions.[50] The order, which was issued in April 2013, is reportedly intended to obscure the relationship of such companies to Khatam al-Anbiya and make the activities of the company appear innocent.

Irano Hind Shipping Company

97. The Panel continues to assess that the designation of the Irano Hind Shipping Company (IHSC) under resolution 1929 (2010) has had little impact on the operations of the company's vessels. It remains difficult for States to identify vessels that belong to IHSC, or other designated entities, because of frequent changes of name and registered ownership.

98. IHSC was dissolved by shareholders in April 2013, although the process of dissolution and liquidation of the company has been slow. The dissolution further complicates efforts to identify vessels because some of them are now owned by Indian entities.

99. During the current mandate, there were no changes in ownership of the six remaining IHSC vessels. Despite the dissolution of IHSC, two crude oil tankers, the *Amin 2* and *Tour 2*, and one bulk carrier, the *Sinin*, remain active under the ownership of shell companies for IHSC. During this period, those vessels anchored at the ports of three States and sailed through the territorial waters of a number of others. No activity was noted for the three other vessels, the *Attar*, *Sattar* and *Teen* (annexes VIII and IX).

100. Some States avoid freezing assets of IHSC or other designated IRISL subsidiaries by disallowing their entry into their territorial waters for a variety of reasons. One reason might be a lack of clarity regarding ownership of the vessel.

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[49] Dexter Filkins, "The shadow commander", *The New Yorker*, 30 September 2013; Mushreq Abbas, "Iran looks to Iraq for Syria support", *Al-Monitor*, 13 September 2013; Ben Hubbard, "Angry over Syrian war, Saudis fault U.S. policy", *New York Times*, 25 October 2013.

[50] See Sharq al-Awsat article on Iranian directive, 18 January 2014, available from http://www.aawsat.com/details.asp?section=4&article=758036&issueno=12835#.U2eWqPldVqM.

Islamic Revolutionary Guard Corps

101. IRGC as a whole is not designated under the relevant resolutions. Its senior leadership is designated under resolutions 1737 (2006) and 1747 (2007). In addition, some entities designated under the resolutions are owned, controlled, or acting on behalf of IRGC.

102. Some designated individuals no longer hold the positions referred to in the designation lists of resolutions 1737 (2006) and 1747 (2007). The designation lists have not been amended or updated since the adoption of resolution 1929 (2010). Many States have expressed frustration that the current lists do not reflect these changes.

103. The following table, based on open-source information, illustrates these changes. In providing this information, the Panel is not seeking to propose additional names for designation.

Designated individual (current position)	*Position*	*Current commander*
Major General Yahya Rahim Safavi (Senior Military Aide to the Iranian Supreme Leader)[a]	Commander of IRGC	Major General Mohammad Ali Jafari
Brigadier General Morteza Rezaie	Deputy Commander of IRGC	Brigadier General Hosein Salimi[b]
Brigadier General Mohammad Reza Zahedi (Commander of Quds Force Lebanon)[c]	Commander of IRGC Ground Force	Brigadier General Mohammad Pakpour
Major General Hossein Salimi	Commander of IRGC Air Force[d]	Brigadier General Amir Ali Hajizadeh
Rear Admiral Morteza Safari	Commander of IRGC Navy	Rear Admiral Ali Fadavi
Brigadier General Mohammad Hejazi (Deputy Chief of Staff of the Iranian Armed Forces)[e]	Commander of Basij Resistance Force	Brigadier General Mohammad Reza Naqdi[f]
Brigadier General Qasem Soleimani	Commander of Quds Force	Promoted to Major General
Vice Admiral Ali Akbar Ahmadian	Chief of IRGC Joint Staff	(Position eliminated)

[a] "Leader's adviser blames certain Arab States for fueling extremism", Tasnim News, 10 January 2014; "Leader's military aide: first bullet on Iran means Israel's destruction by Hezbollah", Fars News, 11 February 2014.

[b] Designated as IRGC Air Force Commander under resolution 1737 (2006).

[c] Will Fulton, *The IRGC Command Network: Formal Structures and Informal Influence* (American Enterprise Institute, Critical Threats Project, July 2013).

[d] The IRGC Air Force was renamed as IRGC Aerospace Force, as a result of IRGC restructuring late in 2009.

[e] "Commander: change in enemies' tone testifies Iran's might, stability", Fars News, 1 October 2013; "Commander: Iran ready to assist Iraq in countering terrorism", Tasnim News, 5 January 2014.

[f] Designated as a former Deputy Chief of Armed Forces General Staff for Logistics and Industrial Research under resolution 1803 (2008).

104. States have conveyed to the Panel their interest in receiving additional information regarding designated individuals, in particular bio-identifiers, passport numbers, and dates of birth. The Panel notes that there is limited information regarding some of the designated individuals available in the public domain.

105. While the economic activities of IRGC have been affected by sanctions, difficulties in accessing foreign technology have driven them to develop indigenous technical capabilities.[51] On a number of occasions such as the Festival of the Armed Forces' Industrial Researches, IRGC has demonstrated improvement in military technological capability and new armaments, including missiles and drones.[52]

106. Although IRGC remains politically and economically powerful, President Rouhani has recently taken steps to limit its influence by reducing the number of former IRGC officials in his Cabinet.[53] The Rouhani Government decided not to grant a contract to Khatam al-Anbiya for the construction of a highway from Tehran.[54]

IV. Activities of the Panel

107. The Panel's activities have been carried out in conformity with its programme of work for the period from 9 June 2013 to 8 June 2014, as required under paragraph 2 of resolution 2105 (2013).

108. The Panel's composition at the time of the submission of the report is as follows: Salomé Zourabichvili (France), Coordinator; Jonathan Brewer (United Kingdom of Great Britain and Northern Ireland); Chunjie Li (China); Thomas Mazet (Germany); Jacqueline Shire (United States of America); Kazuto Suzuki (Japan); Elena Vodopolova (Russian Federation); and Olasehinde Ishola Williams (Nigeria).

109. In addition to the activities described in paragraph 3, the Panel contributed to a number of seminars and workshops (annex X).

110. The Panel also met, held teleconferences, or corresponded with experts affiliated with international organizations, think tanks and universities, trade associations, and representatives of many private companies (manufacturers, freight forwarders, shippers, banks, consultancies and others). These include the International Atomic Energy Agency, the Financial Action Task Force, IHS Jane's, the Aluminum Association, the London Metal Exchange, the Industrial Bank of Korea, Woori Bank, Standard Chartered Bank, Toray Ltd., Vacon, Parker Hannifin

[51] Zachary Keck, "Iran to unveil new submarine, UAVs, fighter jets and missiles", *The Diplomat*, 24 August 2013; "Iran can build any kind of missiles: Defense min", Press TV, 1 March 2014; "Iranian army unveils new home-made military equipment", Fars News, 20 April 2014; Arthur Holland Michel, "Iran's many drones", Center for the Study of the Drone, 25 November 2013; Sam LaGrone, "Iran launches new submarine class", U.S. Naval Institute News, 27 November 2013.

[52] "DM underlines Iran's fast progress in achieving new military technologies", Fars News, 24 February 2014; "President Rouhani visits exhibition on defensive achievements", Tasnim News, 1 March 2014; "Iran DIO research projects 3th festival", IBIR News, 24 February 2014 (accessed 21 April 2014).

[53] Ali Alfoneh, "President Rouhani's Cabinet: MOIS vs. IRGC?", Foundation for Defense of Democracy Policy Brief, 7 August 2013.

[54] Babak Dehghanpisheh, "Iran deal raises tension with IRGC", *The Daily Star* (Lebanon), 11 February 2014.

SSD Drives, Gambica, Brian Ellis (consultant), Siemens plc United Kingdom, Dubai Ports World, Markus Schiller (Schmucker Technologie), British Iran Chamber of Commerce, ASAN Institute for Policy Studies, International Strategic Research Organisation (USAK), Centre for Information on Security Trade Controls, Istituto Affari Internazionali, Ignazio Messina and C., Mitsubishi Heavy Industries, Asexma Chile A.G., and Håkan Andersson (Saab AB).

111. The Panel submitted to the Committee its midterm report on 9 November 2013. Annex XI contains a list of all reports submitted by the Panel during the current mandate.

112. No national implementation reports were received under resolution 1929 (2010) during the reporting period. More than half the States have yet to report.

113. The Committee, with the assistance of its Panel of Experts, held an open briefing for Member States, in New York, on 15 July 2013. This exercise enabled States to hear from the Committee and the Panel, ask questions, and better understand issues related to sanctions implementation and the work of the Committee.

Acknowledgments

114. The Panel wishes to acknowledge the continuing high degree of cooperation from many States during the course of its work. It also acknowledges valuable and proactive engagement from many private sector entities. The Panel wishes to express gratitude for the continuing support from the United Nations Secretariat.

Annex I

Member States visited by the Panel

1. **Albania**
2. Armenia
3. Australia
4. **Austria**
5. Azerbaijan
6. Bahrain
7. Belarus
8. Belgium
9. Brazil
10. **Bosnia and Herzegovina**
11. Bulgaria
12. **Canada**
13. **Chile**
14. China
15. **Colombia**
16. **Croatia**
17. **Cyprus**
18. Djibouti
19. **Ecuador**
20. Egypt
21. Ethiopia
22. **Finland**
23. **France**
24. Georgia
25. Germany
26. **Greece**
27. Guatemala
28. **Hungary**
29. India
30. **Iraq**
31. **Israel**
32. **Italy**
33. Japan
34. Jordan
35. Kazakhstan
36. **Kenya**
37. **Kyrgyzstan**
38. **Lithuania**
39. Luxembourg
40. Malaysia
41. Malta
42. Morocco
43. Namibia
44. Netherlands
45. New Zealand
46. Nigeria
47. Norway
48. Oman
49. Panama
50. **Philippines**
51. Qatar
52. **Republic of Korea**
53. Romania
54. Russian Federation
55. Saudi Arabia
56. **Serbia**
57. **Singapore**
58. **Slovenia**
59. **Spain**
60. Sweden
61. **Switzerland**
62. **Tajikistan**
63. **The former Yugoslav Republic of Macedonia**
64. Togo
65. **Turkey**
66. Turkmenistan
67. Ukraine
68. **United Arab Emirates**
69. **United Kingdom**
70. United States
71. **Uruguay**
72. Viet Nam
73. Yemen

States visited by the Panel during the current mandate are in bold.

Annex II

Items inspected by the Panel

Table 1
Finished goods

	Item	*Quantity*	*(1) Manufactured in (2) Shipped from*	*Consignee according to documentation where available*
1	Electrical discharge machine tools[a,*]	Seven	(1) Spain (2) Spain	A front company in Turkey
2	Electromagnetic equipment	Four items and software	(1) Poland (2) Poland	Electronic Afzar Az, No. 1 Rooz Alley Tavanir St., Vali-Asr Ave., Tehran[b]
3	Pressure reducers (rupture discs)	24	(1) Canada, Brazil (2) United Kingdom	Abadan Petrochemical Co, No 6 Naft Street, Mirdamad Ave, Tehran 191898553
4	Electronic chips and circuits (printed circuit boards)	No information available	(1) Islamic Republic of Iran (2) China	Pooya Kong Port Trading Co. (Ltd), Unit 1, 4th Flr, No. 704 BTW[c] Shariati & Bahar St, Engehlab Ave, Tehran.
5	Electronic chips and circuits	No information available	(1) Not known (2) United States	No information available
6	Electronic chips and circuits	38 items, 549 kg	(1) Not known (2) Malaysia	An individual in Tehran
7	Stainless steel bellows	7,000	(1) China (2) China	Shahab Jamili[d]
8	Lead acid batteries	No information available	(1) China (2) China	No information available
9	Cold pilger	One	(1) Not known (2) China	(a) Prime Star Shipping LLC, PO Box 42238, Dubai, UAE, (b) Zamanian Zeinali General Trading Co LLC
10	Electric oven	One	(1) Not known (2) China	Telecommunications Corporation Muhafaza Co, Iran
11	Bobbin inductors	150 items	(1) China (2) Syrian Arab Republic	An individual in Tehran
12	Inverters (frequency changers)	670 items	(1) China (2) China	An individual in Tehran

	Item	*Quantity*	*(1) Manufactured in (2) Shipped from*	*Consignee according to documentation where available*
13	Measuring devices	Several hundred different items	(1) Not known (2) China	Solaleh Tejarat Astara Co. Ms. Darian, Unit 7, 4th floor No. 18 Ahmadian St.: Khaled Eslamboli St., Arjantin Square, Tehran
14	Fibreglass reinforced plastic cable carriers*	2,528 packages (ten 40 ft containers)	(1) India (2) India	Oil Industries Engineering and Construction (OIEC) Group, No 2, Pirooz Street, South Kamranieh Ave, Tehran[c]
15	Fibreglass reinforced plastic cable carriers*	2,131 packages (six 40 ft containers)	(1) Not known (2) India	Kala Tond Bar International Transport Co., No 11, 2nd Flr, Lotfi St., Haft E Tri Sq, Tehran
16	Fibre optic cable (fibre optic gyroscopes)*	Three	(1) Russian Federation (2) China	An individual in Tehran
17	Aluminium parts (type 7075) (machined parts)*	Several hundred assorted	(1) China (2) China	An individual with no further details

* Inspection reports on these items are still pending.

[a] The end user of the tools was identified as Mapna Turbine Blade Manufacturing Equipment Co., 231 Mirdamad Avenue, Tehran, P.O. Box 15875-5643.

[b] The end user of the equipment was identified by the manufacturer to be the School of Electrical Engineering, Sharif University of Technology, Tehran.

[c] BTW in this context means "between".

[d] Shahab Jamili is listed in Trade Directories as Managing Director of Nicaro Engineering Co Ltd, Head Office Unit 13, Third Floor, No 154/2, Dolatshad Bldg, Africa Street, Tehran. Nicaro Engineering has been associated by a Member State with procurement for Iran's prohibited nuclear activities.

[e] According to State which carried out the interdiction, for re-shipment to Neka Novin Co. (known as Neksa Nero) Iran.

Table 2
Raw and semi-finished materials

	Item	*Quantity*	*(1) Manufactured in (2) Shipped from*	*Consignee according to documentation where available*
18	Sodium silico-flouride	1,000 boxes	(1) Not known (2) China	No information available
19	Nitrogen phosphorus devices	No information available	(1) Not known (2) United States	No information available
20	Aluminium alloy 2024 T3 cylinders **(controlled item)**	21 cylinders, 625,000 kg	(1) Not known (2) China	No information available
21	Chopped carbon	693 kg	(1) Not known (2) China	No information available
22	Stainless steel bars	73 bars of different dimensions	(1) Not known (2) China	No information available
23	Pure iron bars (DT4A)	1,002 kg	(1) Not known (2) China	An individual in Tehran
24	Carbon fibre **(controlled item)**	1,800 bobbins, 7,200 kg	(1) Japan (2) China	Mina Tejarat Sanabad, of Mashad, Iran (for attention of Hamidreza Afzalian Shirvan)
25	Aluminium 7075*	507 kg of sheets	(1) China (2) China	Towsan Tarabar Int'l Transport Co., No 01 West No 53 after Kordestan Bridge, Mollasadra Ave., Tehran, Iran P.O. Box 1991614661
26	Steel pipes*	Approx 22,000 kg (including other items in shipment)	(1) China (2) China	Ocean Lotka International Shipping and Forwarding Co. Unite 1602, 16th Floor No 2230 Valiasr St, Sepehr Saee Tower, Tehran
27	Titanium tubes (concealed inside steel pipes above)*	Ten	(1) China (2) China	Ocean Lotka International Shipping and Forwarding Co. Unite 1602, 16th Floor No 2230 Valiasr St, Sepehr Saee Tower, Tehran
28	Aluminium rods (7075)* **(controlled item)**	Approx 7,600 kg	(1) Not known (2) China	An individual in Tehran
29	Zircon sand*	100,000 kg	(1) India (2) India	Silicate Gostar Kaveh, 3rd Floor, Apt No. 18, 181 North Shiraz Street, Mollasadra Street, Tehran
30	Zircon sand*	208,000 kg	(1) South Africa (2) South Africa	Kalayee Saree International Shipping & Forwarding Co., No 296, Taleghani Avenue, 8th Floor, Tehran

* Inspection reports on these items are still pending.

Annex III

Attempted procurements of carbon fibre tow and fabric

The following cases illustrate the range of claimed end uses, procurement methods, and inconsistencies which raised the suspicions of the authorities or manufacturer. In no case did exports of carbon fibre take place.

Case 1. In December 2010, a South Asia-based trader forwarded an order placed by a company in Tehran for 20,000 kg of carbon fibre tow. This material falls below the control thresholds contained in the relevant resolutions. The stated end use was for production of core conductor for electrical transmission cables. The company's website listed amongst its business partners several Iranian entities which were sanctioned or designated under various different sanctions regimes on the Islamic Republic of Iran. The stated end use for the carbon fibre tow appeared unusual in the context. Separately, an independent expert noted that use of core conductor in electrical transmission cables was fairly new technology which would normally be used in construction of a new electricity distribution system, rather than in a country with an existing system.

Case 2. In September 2010, an Iranian company attempted to purchase 100,000 kg of carbon fibre fabric of a type controlled under lists in the relevant resolutions. The stated end use was repairing and strengthening concrete structures. The company's website contained references to the role of composite fibre reinforced polymers in maintenance and reinforcement of structures. The company was listed in at least one online trade directory as a purchaser of carbon fibre fabric, textile and leather products.

Case 3. In September 2010, a company in a State neighbouring the Islamic Republic of Iran attempted to purchase 15,000 kg of carbon fibre fabric. This material falls below the control thresholds contained in the relevant resolutions. The stated end use was concrete reinforcement and repairing of concrete structures at civil constructions in the State concerned. The purchaser's commercial license appeared to be falsified and the stated address and telephone numbers of the purchaser could not be matched to any known data. The purchaser also could not be found in a company registry.

Case 4. In November 2011 a company in a State neighbouring the Islamic Republic of Iran attempted to buy 10,000 kg of unidirectional carbon fibre fabric. This material falls below the control thresholds contained in the relevant resolutions. The stated end use was rehabilitation and composite repair of structures such as buildings and bridges. The end-use certificate was not initially signed or officially endorsed but was subsequently signed on behalf of both consignee and end user by the same person, a branch manager. The company had no obvious connection with the carbon fibre trade, or use of carbon fibre. A registry of companies in the State concerned revealed that the two owners were Iranian nationals. The branch manager was also Iranian and turned out to be a former branch manager of the company in Tehran. The managing director of the company denied that any order for carbon fibre had been placed. Separately, authorities in the State neighbouring the Islamic Republic of Iran carried out an investigation which showed that "the company had never exported carbon fibre".

Annex IV

Technical document regarding IR-40 heavy water research reactor

The following are excerpts from an engineering and construction document consisting of design specifications for the IR-40 reactor at Arak. It was submitted by prosecutors in Germany as part of a legal proceeding against individuals who were part of an overseas procurement network to obtain valves and other parts for the reactor. This document came from the computer of an Iranian national who was responsible for overseeing the procurement network. The case was investigated by the Panel in its 2013 report (see S/2013/331, paras. 18-22).

There are four excerpts below: (1) a description of Project 200, the Islamic Republic of Iran's name for the IR-40 reactor project; (2) background describing the reactor design; (3) a statement regarding the reactor's location; and (4) information regarding procurement which is to take place in the name of a petrochemical company.

Ambient Conditions: The conditions constrained by environment or surrounding area

Emergency Conditions: The limitations forced by the situation that is dangerous or can be dangerous with high probability

Absorption Cross Section: The cross-sectional area of the element, which is related to the probability of interaction in which the neutrons are absorbed

EBC Factor Equivalent Boron Content, which can be calculated as per following equation where A.C.S. is Absorption Cross Secuon

$$EBC = \frac{\text{(A.C.S. of alloying element)} \times \text{(Atomic weight of B)}}{\text{(A.C.S. of B)} \times \text{(Atomic weight of alloying element)}}$$

Total Equivalent Boron Content (TEBC): The sum of EBC factors of existed elements in an alloy

5.0 PLANT DESCRIPTION

5.1 Project 200 is aimed to design and construct a 40 MW research reactor which will be used for production of various radioisotopes with several and varied applications in the country. These radioisotopes can be used in radiation processing, radiation therapy, radiography, scanning and tracer purposes and other peaceful applications of nuclear energy.

5.2 This Plant consists of several systems and units including core, primary and secondary cooling systems, coolant purification and upgrading systems, demineralized water system, plant & instrument air system, workshop, offsite general buildings, etc.

5.3 The general information about the Plant, equipment and site situations can be obtained from Conceptual Report of Project (Doc. No.: 200 – 000 – PE – RT – 001) and Basic Engineering Design Data (BEDD – Doc. No. 200 – 000 – PE – DB – 002).

Descriptions of reactor background, and reference to deuterium oxide, or heavy water

PART - III PLANT MATERIAL SELECTION

12.0 CORE

Nuclear reactors are systems that, in a controlled manner, transform nuclear into thermal energy. The energy released in a nuclear reactor originates in the transformation of atomic nuclei. The essential part of a reactor is the reaction (active) core, also known as "the core", containing the fuel and the moderator in either a homogeneous mixture or heterogeneous configuration.

One of the common techniques for fuel rods arrangement in core is using modules of stainless steel honeycomb structures with rectangular fuel storage cells. It can be provided in two or more racks of these modules.

Removal of heat from the reactor core is achieved by means of cooling agents.

In most of the cases a closed circuit is used, where a primary heat transfer agent removes the heat from the reactor core, transfers it in a heat exchanger to a secondary agent, then returns to the core.

.....

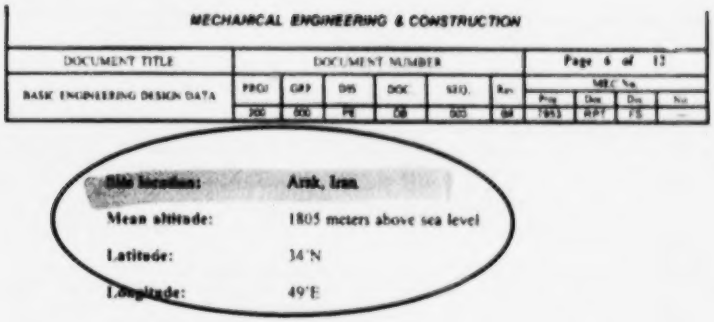
14.0 SECONDARY SYSTEM

Because of D_2O mixing possibility between primary and secondary system, primary design consideration shall be regarded in secondary system.

One of the most important considerations in material selection for nuclear plant especially in secondary system is limiting the sulfur content in component material, such as pressure vessels, heat exchangers, storage tanks and so on. Sulfur content in these plants in the world usually is limited to 0.005% and less so that for steam generators and pressure vessels 0.004 & 0.003 have been seen too. Lowering sulfur level would, again, improve toughness and it would reduce sensitivity to any kind of environmentally assisted crack growth. At this stage and consistent with current design practice in the world to go to much lower sulfur levels lowering sulfur content can be considered as an essential strategy in material selection.

The technical specification of the secondary system with more detailed information and data shall be illustrated in detail design.

Location of reactor



MECHANICAL ENGINEERING & CONSTRUCTION

DOCUMENT TITLE	DOCUMENT NUMBER						Page 6 of 12			
BASIC ENGINEERING DESIGN DATA	PROJ	GRP	SYS	DOC	SEQ.	Rev.	MEC No.			
							Proj	Doc	Dis	Suf
	200	000	PE	DB	005	04	1943	ARF	FE	—

Site location:	Arak, Iran
Mean altitude:	1805 meters above sea level
Latitude:	34°N
Longitude:	49°E

Procurement for reactor project as petrochemical company

MEC

MECHANICAL ENGINEERING & CONSTRUCTION

DOCUMENT TITLE	DOCUMENT NUMBER							Page 3 of 15			
								MEC No.			
GENERAL PROCUREMENT CONDITIONS	Doc.	Ph	Proj./ Unit	Sys.	Prod./ Disc.	Ser. No.	Rev.	Proj.	Doc.	DIS.	No.
	PRC	0	200/Y	0000	ME/PM	011	05	7953	PRC	GE	001

1. GENERAL

This specification covers the general procurement conditions for the materials and/or equipment which are to be supplied according to the tender documents, standards, data sheets, specifications and drawings attached to Purchase Order and according to conditions both general and specific which are stated below, unless any or all of them shall have been modified or cancelled either as a whole or in part by Purchaser.

2. DEFINITIONS

Owner		Chemical & petrochemical Company
Purchaser		Chemical & petrochemical Company or its nominated Representative
Consultant		MEC Engineering & Construction
Purchaser Representative	:	All persons and/or companies assigned by Purchaser to act on behalf of Purchaser
Bidder, Vendor, Supplier, Contractor, Manufacturer	:	The party offering his products and services in accordance with the documents and or who is willing to enter into a contract with Purchaser
Site	:	The location where the materials/equipment are to be installed and/or Used
Tender Documents or Quotation Request	:	All documents, including forms, specifications data sheets, drawings, notes etc. that are submitted to Vendor at the tender or quotation stage
Purchase Order Documentation	:	All documents, including forms, specifications, data sheets, drawings, notes, etc. that are issued to the successful bidder at the order stage
Acceptance	:	When Purchaser, after the operating and performance test, declares himself satisfied for materials/equipment performance and accepts it
Shall	:	Mandatory
Should	:	Advisory

3. LANGUAGE AND MEASUREMENT SYSTEM

3.1 LANGUAGE REQUIREMENT

All documents, correspondence, drawings, catalogues, test certificates, operation and maintenance manuals and any other submittals by Vendor and/or his sub-vendors, manufacturers and suppliers shall be in English, or containing the complete and exact translation of the content in English.

3.2 SYSTEM OF UNITS AND MEASUREMENTS

All engineering design data shall be based on metric system of units except for pipe sizes and flange ratings, which will be in English units.

Annex V

Case studies illustrating financial transactions involving Iranian entities

Case study 1. A foreign national set up a trading company in a State in the Middle East and opened a series of accounts on behalf of the company at an international bank in the State concerned. These accounts were denominated in local currency and in euros, United States dollars, and other foreign currencies. Monitoring by the international bank showed that the trading company's account received funds in local currency from only one source (a second company set up by another foreigner). These local currency funds were then quickly switched into foreign currencies and transferred overseas. This activity triggered investigations by the bank, which indicated that the owners of the companies involved had links to the Islamic Republic of Iran. The bank suspected the funds were coming from the Islamic Republic of Iran and being channelled through the trading company into the global financial system.

Case study 2. A foreign national set up a trading company in a State in the Middle East and opened an account on behalf of the company at an international bank in the State concerned. Monitoring by the bank showed a high turnover of funds, and the bank suspected money-laundering was taking place. Investigations by the bank showed that the foreign national's stated employment was as a member of staff in a second company, which had the same telephone number as the trading company. Further investigation revealed that this telephone number was the same as that belonging to two other companies previously identified by the bank as having Iranian shareholders and being involved in Iranian business. The bank therefore suspected the trading company was being used as a front for Iranian business.

Case study 3. A national of a State in the Middle East set up a company in that State in partnership with a foreign national as a minority shareholder, and opened an account on behalf of the company at an international bank in the State concerned. Multiple large payments were being made from this account to several companies at the same address in one State in Europe, and also to a second set of companies sharing the same address in a second State in Europe. The bank's monitoring identified this pattern as possible money-laundering, and further investigation revealed that the national of the State in the Middle East was also a manager of another company that did business with the Islamic Republic of Iran.

These methods of transferring funds might be adopted by Iranian entities involved in legitimate procurement. They could also be used by Iranian entities involved in illicit procurement. They may therefore be of assistance to States implementing obligations under paragraph 22 of resolution 1929 (2010) to require their companies to exercise vigilance when doing business with Iranian entities if they have information that provides reasonable grounds to believe that such business could contribute to the Islamic Republic of Iran's proliferation-sensitive nuclear activities, its development of nuclear weapon delivery systems or to violations of Security Council resolutions.

Many banks and other financial institutions already have in place strict due diligence procedures to ensure they do not unwittingly process transactions that might be subject to sanctions on the Islamic Republic of Iran. Such procedures

include prior screening of transactions that ensure no party involved is listed. In addition many banks also carry out additional monitoring to detect patterns of financial activity which might not be consistent with the declared activities of their account holders. Some of the patterns of sanctions evasion may be similar to patterns of criminal activity, such as money-laundering. Where such patterns are detected banks will normally carry out further investigations. In many such cases it is not possible to confirm whether a breach of Security Council sanctions has occurred.

Annex VI

Alumina-aluminium barter transaction

According to information obtained by the Panel, the Islamic Republic of Iran has engaged in a number of barter transactions with international companies in which it receives alumina in exchange for aluminium ingot. Alumina is the raw material necessary for the production of aluminium.

The Panel understands that such transactions are routine in the case of the Islamic Republic of Iran and have pre-dated the imposition of international sanctions.

In one example studied by the Panel, the Iranian smelter received 30 tons of alumina, which would yield approximately 15 tons of aluminium.

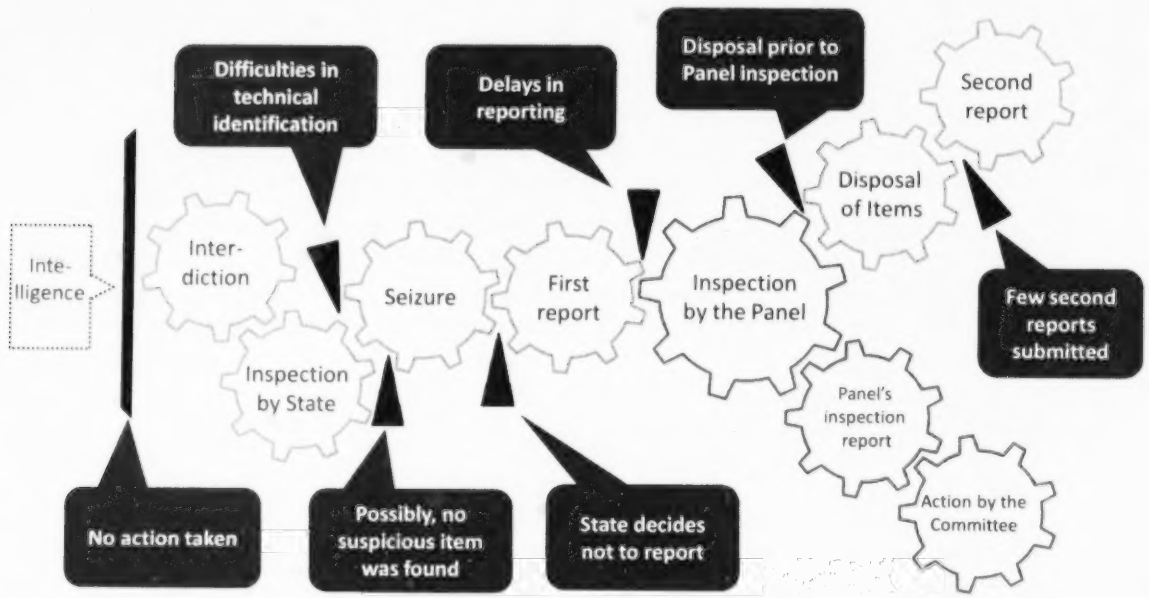
Under the terms of the swap, the international company received approximately one third of the yield, or 5.4 tons of aluminium ingot in exchange, leaving the Islamic Republic of Iran with the balance of just under 10 tons.

Such arrangements offer advantages to both parties: the international company is able to obtain aluminium ingot at an advantageous price, while the Islamic Republic of Iran is able to obtain alumina without accessing the international financial system.

The Panel wishes to emphasize that there are no prohibitions under Security Council resolutions concerning the Islamic Republic of Iran that would prohibit such trades, where there is no involvement of designated individuals or entities, or prohibited programmes. The Islamic Republic of Iran has legitimate demand for raw materials and there are no sanctions that prohibit barter or swaps in aluminium or other materials.

Annex VII

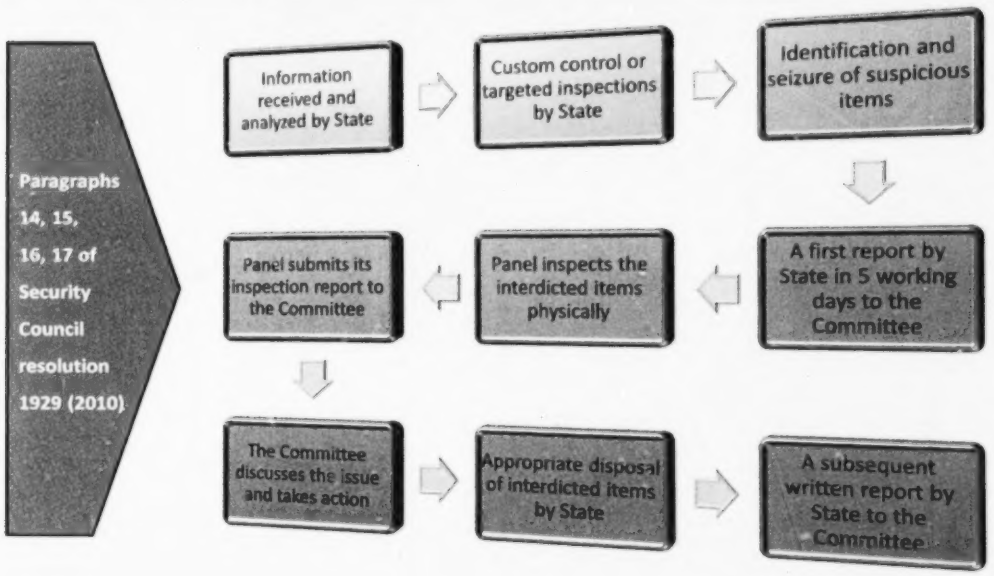
Reporting and disposal — requirements and challenges



Note: Green gears are for States; blue ones for United Nations bodies.

Implementation of United Nations Sanctions on Iran

The following outlines the steps necessary for effective implementation of measures from the seizure to disposal of interdicted items. Such steps require strong political will, due diligence, international and domestic coordination, technical capabilities to identify and analyze suspicious items, and prompt, appropriate actions.


Paragraphs 14, 15, 16, 17 of Security Council resolution 1929 (2010)
Information received and analyzed by State
Custom control or targeted inspections by State
Identification and seizure of suspicious items
A first report by State in 5 working days to the Committee
Panel inspects the interdicted items physically
Panel submits its inspection report to the Committee
The Committee discusses the issue and takes action
Appropriate disposal of interdicted items by State
A subsequent written report by State to the Committee

Annex VIII

Changes in Irano Hind Shipping Company fleet since April 2013

Current name	*Previous name*	*Current flag*	*Previous flag*	*Registered owner*	*Previous registered owner*	*Movement summary*
Attar IMO 9074092	*Parisian Trader*	United Republic of Tanzania	Malta	Alicia Marine Company Limited*	– ISIM ATR Limited – ISI Maritime Limited – IHSC Limited – Orientsea Shipping Corporation – Ratu Shipping Company S.A.	At Bandar Abbas since November 2012
Sattar IMO 9040479	*Belstar*	Unknown	United Republic of Tanzania	Alicia Marine Company Limited*	– ISIM Sat Limited – ISI Maritime Limited – IHSC Limited – Belstar KS	At Bandar Abbas since February 2013
Sinin IMO 9274941	*Laurinda*	Togo	Unknown	Alicia Marine Company Limited*	– Isim Sinin Limited – Pro Shipping Incorporated	
Teen IMO 9101649	*Oriental Dream* *Eun Ji*	Unknown	United Republic of Tanzania	Alicia Marine Company Limited*	– Biis Maritime Limited – Doric Maritime Corporation	At Bandar Abbas since February 2012
Amin 2 IMO 9422366	*Amin*	Islamic Republic of Iran	Togo	Auris Marine Company Limited**	– Isim Amin Limited	
Tour 2 IMO 9364112	*Tour*	Islamic Republic of Iran	Unknown	Auris Marine Company Limited**	– Isim Tour Limited	

Current name	*Previous name*	*Current flag*	*Previous flag*	*Registered owner*	*Previous registered owner*	*Movement summary*
Ramtin IMO 9003237	*Volga*	Islamic Republic of Iran	Togo	Tabuk Maritime Incorporated	– Auris Marine Company Limited – ISIM Olive Limited – ISI Maritime Limited – Neste Oil Oyj	
Desh Shobha IMO 9459046	*Taj Mahal*	India	Malta	The Shipping Corporation of India Limited	– IHSC Limited	

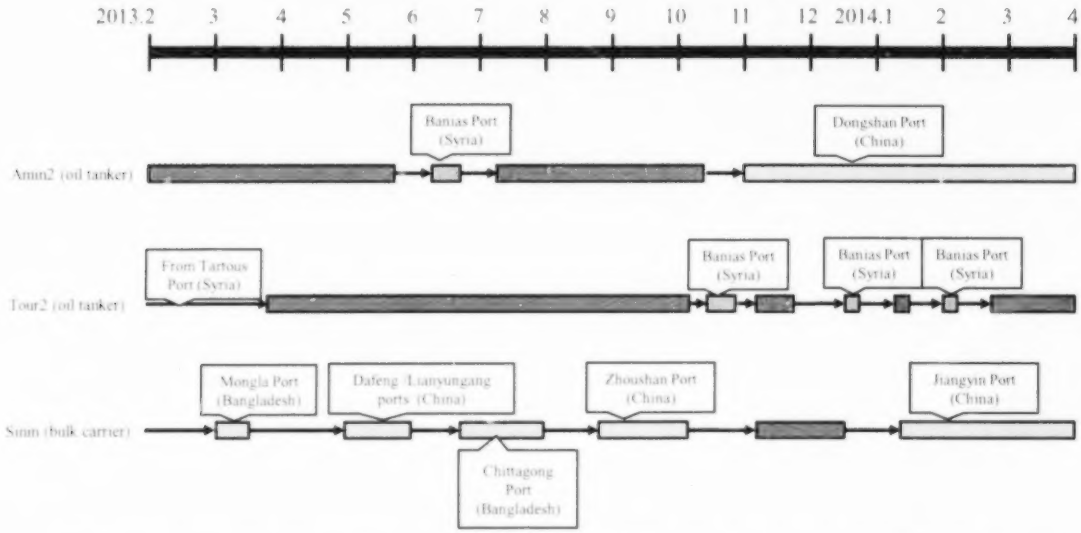
Note: Yellow denotes change, gray denotes ownership change to Indian companies.

* Address: c/o Irano Hind Shipping Co Ltd, PO Box 15875, Mehrshad Street adjacent to Sedaghat Street, opposite Park Mellat Vali-e-Asr Avenue, Tehran (*Source*: IMO Company & Registered Owners Identification Numbers Database).

** Address: c/o Irano Hind Shipping Co Ltd, PO Box 15875, Mehrshad Street adjacent to Sedaghat Street, opposite Park Mellat Vali-e-Asr Avenue, Tehran (*Source*: IMO Company & Registered Owners Identification Numbers Database).

Annex IX

Movement of Irano Hind Shipping Company vessels



Among the three active vessels of IHSC, *Tour2* and *Sinin* are the most active. Compared to previous years, the frequency of *Tour2* visits to Syrian ports has increased since the second half of 2013, which suggests that the *Tour2* has few obstacles in sailing through the Suez Canal even while flying the Iranian flag. The *Sinin* sails largely between Iran and Asian countries.

Annex X

Seminars and Workshops Attended by the Panel

No.	*Seminar/Workshop*	*Country*	*Date*
1	Financial Action Task Force plenary and working group meetings	Norway	June 2013
2	Asia Pacific Group on Money Laundering Annual Meeting and Technical Assistance Forum	China	July 2013
3	International Institute for Strategic Studies Workshop on United Nations sanctions on Democratic People's Republic of Korea	United Arab Emirates	September 2013
4	Wilton Park Conference on Evolving Challenges of Illicit Nuclear Procurement	United Kingdom	September 2013
5	Counter-Terrorism Committee Executive Directorate and Middle East and North Africa Financial Action Task Force Workshop on implementation of Security Council resolutions and combating money-laundering and the financing of terrorism and proliferation	Jordan	October 2013
6	Women's International Shipping and Trading (HK) Association Workshop on Iran sanctions	China	October 2013
7	World Exports Control Review Forum	United Kingdom	November 2013
8	Counter-Terrorism Committee Executive Directorate and Asia Pacific Group on Money Laundering Secretariat Meeting on asset freeze requirement of Security Council resolutions	Thailand	December 2013
9	International Institute for Strategic Studies Workshop	China	December 2013
10	China Arms Control and Disarmament Association Workshop on international non-proliferation regime and regional arms control	China	December 2013
11	Asia Pacific Group on Money Laundering Secretariat Meeting on targeted financial sanctions	United States of America	December 2013
12	African Union Workshop for African States on Implementing Security Council resolutions	Ethiopia	December 2013
13	United States Department of State Conference on the financing of the proliferation of weapons of mass destruction	Qatar	December 2013
14	Institut de relations internationales et stratégiques Seminar on conventional arms embargo	France	December 2013

No.	*Seminar/Workshop*	*Country*	*Date*
15	Financial Action Task Force plenary and working group meetings	France	February 2014
16	Center for Information on Security Trade Control Seminar on Asian export control	Japan	February 2014
17	King's College address on the scope of United Nations sanctions	United Kingdom	March 2014
18	China Arms Control and Disarmament Association Workshop on non-proliferation and export compliance in the composites	China	March 2014
19	Eastern and Southern Africa Anti-Money Laundering Group Workshop on Implementation of Security Council resolutions	United Republic of Tanzania	April 2014
20	Workshop on Security Council resolution implementation	Saudi Arabia	April 2014
21	Counter-Terrorism Committee Executive Directorate and Middle East and North Africa Financial Action Task Force Regional Workshop on asset freeze requirement of Security Council resolutions	Tunisia	May 2014